# Arizona State University Academic Catalog Archive 2011-2012 

This document provides an archival record of the academic programs offered during the 20112012 academic year. It is a printable option of the online catalog for accreditation organizations, agencies and university offices for data collection, evaluation purposes and referencing. Academic advisors, faculty and students should refer to the online version of the academic catalog.

To navigate this document version of the Academic Catalog 2011-12, refer to the Table of Contents and the bookmarks provided. Most undergraduate degrees have a corresponding major map that includes the critical requirements, order of courses and grade requirements for that degree. The major maps are provided in the final sections of this document.

Corrections or additions to the Academic Catalog Archive 2011-12 program information and major maps, as of July 31, 2011, may be provided in a future addendum. For inquiries or questions please contact academic.catalog@asu.edu.


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## ASU Mission, Vision and Values

## ASU Mission

To establish ASU as the model for a New American University, measured not by who we exclude, but rather by who we include; pursuing research and discovery that benefits the public good; assuming major responsibility for the economic, social, and cultural vitality and health and well-being of the community.

## ASU Goals 2002-2012

## Access and Quality for All

- Expand university access to match Arizona diversification
and growth
- Improve freshmen persistence to 90 percent Enhance university graduation rate to 70-75 percent
as soon as possible
- Develop ASU culture that represents a commitment to quality and community outreach
- Enroll 100,000 continuing education and degree completion students (including our contributionto AZUN)
- Enhance linkages with community colleges so as to expand baccalaureate degree production
- Enhance student development and individual student learning


## National Comprehensive University by 2012

- Become a leading center for interdisciplinary science and technology discovery and development
- Become a leading center for discovery and scholarship in the social sciences, arts and humanities.
- Enhance research and discovery competitiveness to more than $\$ 300$ million (in 2006 dollars) in annual research expenditures
- Enhance regional economic competitiveness through research and discovery and value-added education programs


## Establish National Standing in Academic Quality and Impact of Colleges and Schools in Every Field

- Attain national standing in academic quality for each school
- Attain national standing in the value added to our graduates in each school
- Become the leading university academically
( faculty, discovery, research, creativity )
in at least one core subject within each school or college


## Enhance Our Local Impact and Social Embeddedness

- Enhance linkage to local and regional social and community development groups
- Establish/develop/enhance linkages and partnerships with local, regional and national NGO's, governments and public agencies, and private sector firms with a focus on community development
- Undertake applied sustainability research that impacts the social, environmental and economic evolution of the southwest
- Provide an objective and ongoing monitoring role for the region's progress through the ASU Indicators Project

Source URL: http://president.asu.edu/about/asuvision

## Institutional Inclusion

ASU is deeply committed to positioning itself as one of the great new universities by seeking to build excellence, enhance access, and have an impact on our community, state, nation and the world. To do that, requires that our faculty and staff reflect the intellectual, ethnic and cultural diversity of our nation and world so that our students learn from the broadest perspectives and we engage in the advancement of knowledge with the most inclusive understanding possible of the issues we are addressing through our scholarship. As one part of this commitment, we have developed a strategic plan for diversity at ASU. Developed in consultation with a wide variety of constituencies within the university and the deans, this plan, called "Building blocks for success through people, programming and policies," contains a statement which serves as an ongoing touchstone of our commitment and several specific initiatives which will change and evolve over time depending on the challenges and opportunities we have before us.

Diversity is defined in terms of representation and inclusion. Representation reflects the extent to which our students, staff, faculty and administrators proportionately reflect the regional and national populations served by our public institution. Inclusion encompasses empowerment and voice among all members of the university community in the areas of scholarship, teaching,
learning and governance. We recognize that race/ethnicity and gender historically have been markers of diversity in institutions of higher education; we further believe that diversity includes additional categories such as socioeconomic background, religion, sexual orientation, gender identity, age, disability, veteran status, nationality and intellectual perspective.

Source URL: http://diversity.asu.edu/asudiversityplan

## Accreditations

University Accreditation Officer and Executive Vice Provost for Academic Affairs/Dean of the Graduate College

## Maria T. Allison

480.965.7279 Fax: 480.965.0375
maria.allison@asu.edu
Office Specialist, Accreditation

## Carla McNeil-Baxter

480.965.6942 Fax: 480.965.0375
carla.mcneil-baxter@asu.edu
At Arizona State University (ASU), the Executive Vice Provost for Academic Affairs/Dean of the Graduate College serves as the University Accreditation Officer (UAO). Representing the University President and the University Provost, the UAO officer is charged with the essential functions related to university-wide accreditation activities and with providing guidance and assistance as the process moves forward leading to successful and productive accreditation visits. A list of accredited programs and their accrediting agencies can be found here.

## Functions of the ASU University Accreditation Office

Liaison to the Higher Learning Commission (HLC).
The UAO monitors institutional compliance with HLC requirements and coordinates the institutional evaluation for continuing accreditation by the HLC every ten years. The UAO also facilitates HLC approval of program and/or institutional changes where required. As a program prepares for accreditation, it is encouraged to visit the HLC website www.higherlearningcommission.org to find information about HLC standards and procedures for accreditation.

## Professional Accreditation Oversight

The UAO works closely with academic units and programs that seek new accreditation or seek re-accreditation. This oversight includes:

1. Coordination of site visitors schedule and university administrators. All programs are asked to coordinate the site visitors schedules/itinerary with the UAO - this to insure that appropriate university administrators will be available at the time of the site visit.
2. Review of self-study draft. The UAO will conduct a review of the self-study draft to assure a self-study that meets the accreditation criteria and guidelines and addresses any problems from previous accreditation and other issues that may be present. A written report will be returned to the program with recommendations and edits.
3. Briefing paper. The UAO will review the briefing paper draft (prepared by the program) and submit recommendations and edits before the final paper is distributed to university administrators and other appropriate officials. The briefing paper is an inhouse confidential resource and not shared with the site visitors.
4. The site visit report and response to the report. The UAO will review the site visit report and the program's draft response, looking for accuracy, completeness, and tone. Based on this review, written recommendations for the program response will be made.
5. Accreditation Status Letter. The original letter is held in the UAO as part of the accreditation permanent records. The UAO will send copies of this letter to the program and supervising administrator. The UAO will enter the date of the next accreditation review into the university calendar which is maintained by this office.
Note: Repository for all accreditation documents. All programs are asked to provide copies of all accreditation records, reports and other documentation to the UAO, as they become available. Records will be held in the UAO until being sent to University Archives.

Source URL: http://graduate.asu.edu/faculty_staff/accreditations

# RECEIVED 

August 8, 2003
AUG 182003
Dr. Michael Crow
President
Arizona State University
Tempe, AZ 85287-2203

## Dear President Crow:

This letter is formal notification of the action taken concerning Arizona State University by the Higher Learning Commission. At its meeting on August 8, 2003, the Institutional Actions Council voted to continue the accreditation of Arizona State University, and to adopt any new items entered on the attached Statement of Affiliation Status (SAS). The Commission Board of Trustees validated that action through its validation process concluded on August 8,2003. The date on this letter constitutes the effective date of this new status with the Commission.

Normally a new Record of Status and Scope (RSS) is attached to this letter. The RSS includes the SAS and the Statement of Institutional Scope and Activities (SISA). The SISA is generated from the database and includes specific information gleaned from your Annual Report as well as from the team. This year we are holding the annual report information gathered online until our database redesign is complete. The Annual Report was designed to link with the new database, not our current one. Therefore, instead of sending you a Record of Status and Scope that is not current, I choose only to send the SAS portion of it. As soon as the new database is finished and tested, I will forward your full Record of Status and Scope. It will summarize the relationship between the Commission and Arizona State University. Modifications to it may require prior approval from the Commission, although several sections of the Statement of Institutional Scope and Activity can be modified through submission of the Annual Report. In the meantime, I highly recommend that if you have any questions about how planned institutional changes might affect your relationship with the Commission, you write or call John A. Taylor, your staff liaison.

> Changes in your institution that would require further Commission action prior to their initiation are found in Chapter 12 of The Handbook of Accreditation, Second Edition and on pages $42-46$ of the March, 2002 , Addendum to the Handbook. The Addendum can be found on the Commission's website at www.ncahigherlearningcommission.org under the Information for Affiliated Institutions and Consultant Evaluators. Please review them with care.

Information about informing the public of this action is found in Chapter 15 of the Commission's Handbook.

On behalf of the Board of Trustees I thank you and your associates for your cooperation.


[^0]

Enclosure: Statement of Affiliation Status
cc: Evaluation Team Members
Chair of the Board

## ARIZONA STATE UNIVERSITY <br> Tempe, AZ 85287-2203

## Statement of Affiliation Status

Status: Accredited (1931- .)
Highest degree awarded: Doctor's.
Most recent action: August 8, 2003.
Stipulations on affiliation status: None.
New degree sites: No prior Commission approval required for offering existing degree programs at new sites within the state. The University must notify the Commission before opening new international sites.
Progress reports required: None.
Monitoring reports required: None.
Contingency reports required: None.
Other visits required: None.
Last comprehensive evaluation: 2002-03.
Next comprehensive evaluation: 2012-13.

## Accredited Programs and Agencies

| Accredited Programs | Accrediting Agencies |
| :---: | :---: |
| College of Liberal Arts and Sciences (T) |  |
| MS, Communication Disorders, Aud. | American Speech-Language-Hearing Association (ASHA) |
| PhD, Psychology (with concentration in Clinical Psychology) | American Psychology Association (APA) |
| College of Nursing \& Health Innovation (D) |  |
| BSN, MS, Nursing; Master of Healthcare Innovation | Arizona State Board of Nursing/Commission of Collegiate Nursing Education (ASBN/CCNE) |
| BS, Nutrition (didactic program in dietetics) MS, Nutrition (dietetic Internship) | American Dietetic Association (ADA) |
| College of Public Programs (D) |  |
| BS, Parks and Recreation Management | National Recreation and Park Association/American Association of Physical Activity and Recreation (NRPA/AAPAR) |
| School of Public Affairs (D) |  |
| MPA, Public Administration | National Association of Schools of Public Affairs and Administration (NASPAA) |
| School of Social Work (D) |  |
| BSW, MSW Social Work | Council of Social Work Education (CSWE) |
| College Technology and Innovation (P) |  |
| BS, Aeronautical Management Technology (with concentrations in Air Transportation Management and Professional Flight | Aviation Accreditation Board International (AABI) |
| BS, Electronic Engineering Technology <br> BS, Manufacturing Engineering Technology <br> BS, Mechanical Engineering Technology | Technology Accreditation Commission for the Accreditation Board for Engineering and Technology, Inc. (TAC) |
| BS, Environmental Technology Management <br> BS, Graphic Information Technology <br> BS, Operations Management Technology | National Association of Industrial Technology (NAIT) |
| Herberger Institute of Design and the Arts ( $T$ ) |  |
| BSD, Interior Design | Council for Interior Design Accreditation (CIDA) |
| BSD, Graphic Design, Industrial Design <br> MSD, Design (with concentrations in Graphic Design and Industrial Design) | National Association of Schools of Art and Design (NASAD) |
| BSLA, Landscape Architecture | Landscape Architectural Accreditation Board (LAAB) |
| BS, Planning <br> MA, Urban \& Environmental Planning | Planning Accreditation Board (PAB) |
| MArch, Architecture | National Architectural Accrediting Board (NAAB) |
| School of Music | National Association of Schools of Music (NASM) |
| Ira A. Fulton Schools of Engineering (T) |  |
| BS, Computer Science | Computing Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc. (ABET) |
| BS, Construction | American Council for Construction Education (ACCE) |
| BSE, Aerospace Engineering <br> BSE, Bioengineering <br> BSE, Chemical Engineering <br> BSE, Civil Engineering <br> BSE, Computer Systems Engineering <br> BSE, Electrical Engineering <br> BSE, Industrial Engineering <br> BSE, Materials Science and Engineering <br> BSE, Mechanical Engineering | Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc. (ABET) |
| Mary Lou Fulton Teachers College (T) |  |
| MC, Counseling | Council for Accreditation of Counseling and Related Educational Programs (CACREP) |
| PhD, Counseling Psychology, Educational Psychology (with a concentration in School Psychology) | American Psychological Association (APA) |
| Sandra Day O'Connor College of Law (T) |  |


| JD, Law | American Bar Association (ABA) |
| :--- | :--- |
| Walter Cronkite School of Journalism and Mass <br> Communication (D) |  |
| All Programs | Accrediting Council on Education in Journalism and Mass <br> Communications (ACEJMC) |
| W.P. Carey School of Business (T) | The Association to Advance Collegiate Schools of Business (AACSB <br> International) |
| All Programs | Professional Golfer's Association of America (PGA) |
| BS, Agribusiness (with concentration in Professional Golf <br> Management) | Commission on Education for Health Services Administration <br> (CAHME) |
| School of Health Management and Policy | The Association to Advance Collegiate Schools of Business (AACSB <br> International) |
| School of Accountancy |  |

Source URL: http://graduate.asu.edu/faculty_staff/accreditations/programs_agencies

University Registrar's Office
Update: June 2, 2011
Summer 2011: May 30 - August 5, 2011

February 15, 2011
February 16, 2011
May 5, 2011
May 19, 2011
May 30, 2011
June 1, 2011
June 15, 2011
June 25, 2011

July 4, 2011
July 6, 2011
July 25, 2011
August 5, 2011
August 10, 2011

Schedule of Classes Available - Online (tentative)<br>Registration Begins (tentative)<br>Suggested Postmark to Meet Tuition/Fee Payment Deadline<br>Tuition/Fee Payment Deadline - for registration from Feb 16 - May 15, 2011<br>Students with unpaid tuition charges automatically enrolled in tuition installment plan on 5/20/11<br>Memorial Day Observed - no classes<br>Residency Classification Petition Deadline<br>Graduation Filing Deadline<br>Tuition/Fee Payment Deadline - for registration from May 16 - June 18, 2011<br>Students with unpaid tuition charges automatically enrolled in tuition installment plan on 6/26/11<br>Independence Day Observed - no classes<br>Deadline for Appealing Residency Classification Decision<br>Tuition/Fee Payment Deadline - for registration from June 19 - July 18, 2011<br>Degree Conferral Date<br>End of Semester Processing Begins

## 1st Summer Session

(5 week session: May 30 - July 1, 2011) (8 week session: May 30 - July 22, 2011)

February 16 - June 1, 2011
May 23, 2011
May 30, 2011
May 31, 2011
June 1, 2011
June 3, 2011
June 17, 2011
July 1, 2011
July 1, 2011
July 1, 2011
July 4, 2011
July 5, 2011
July 22, 2011
July 22, 2011
July 22, 2011
July 26, 2011

Open Registration \& Drop/Add (tentative)
\$50.00 Late Registration Fee begins (does not apply to ASU Online students)
Memorial Day Observed
First Day of Classes
Drop/Add Deadline
Tuition \& Fees 100\% Refund Deadline (both the 5 week \& 8 week sessions)
Course Withdrawal Deadline ( 5 week \& 8 week sessions)
Complete Withdrawal Deadline ( 5 week session)
Last Day to Process Transactions (5 week session)
Last Day of Classes (5 week session)
Independence Day Observed - no classes
Final Grades Due (5 week session)
Complete Withdrawal Deadline (8 week session)
Last Day to Process Transactions (8 week session)
Last Day of Classes (8 week session)
Final Grades Due (8 week session)

## 2nd Summer Session

(5 week session: July 4 - August 5, 2011

February 16 - July 6, 2011
June 27, 2011
July 4, 2011
July 5, 2011
July 6, 2011
July 8, 2011
July 6, 2011
July 22, 2011
August 5, 2011
August 5, 2011
August 5, 2011
August 5, 2011
August 9, 2011
August 10, 2011

Open Registration \& Drop/Add (tentative)
\$50.00 Late Registration Fee begins (does not apply to ASU Online students)
Independence Day Observed - no classes
First Day of Classes
Drop/Add Deadline
Tuition \& Fees 100\% Refund Deadline (2nd 5 week only)
Residency Classification Petition Deadline
(For students only registered in the 2nd summer session )
Course Withdrawal Deadline
Complete Withdrawal Deadline
Last Day to Process Transactions
Last Day of Classes
Degree Conferral Date
Final Grades Due
Deadline for Appealing Residency Classification Decision
(For students onlycregistared Arthatvetition forthe 2nd summer session )

Arizona State University Registration Sites:

| Downtown Phoenix | University Center Bldg., (UCENT) Suite 130 | $602-496-4372$ |
| :--- | :--- | :--- |
| Polytechnic | (QUAD 2) | $480-727-1142$ |
| Tempe | Student Services Bldg., (SSV) Room 140 | $480-965-3124$ |
| West | University Center Bldg., (UCB) Rm 120 | $602-543-8203$ |

All dates are tentative and subject to change without notice.
Dates in yellow indicate changes or updates since the last published date of the semester calendar.
This document is updated and published on the web at http://students.asu.edu/registrar-semester-calendar

## Fall 2011 Semester Calendar

University Registrar's Office
Update: 07/18/11
February 25, 2011
February 28, 2011
March 1, 2011

July 26, 2011
August 9, 2011

## TBD

August 8, 2011
August 18, 2011
August 18-24, 2011
August 24, 2011
August 31, 2011

September 5, 2011
September 7, 2011
September 15-22, 2011
September 28, 2011
October 1, 2011
October 3, 2011
October 20-27, 2011
November 2, 2011
November 11, 2011
November 24-25, 2011
December 6, 2011

December 6, 2011
December 7, 2011
December 8-14, 2011
December 14, 2011
December 15, 2011
December 15, 2011
December 12-19, 2011
December 20-23, 2011
TBD

Schedule of Classes Available - Online
Registration \& Tuition Guide Available - Online
Enrollment Appointments Begin
Students can drop/add courses starting from the assignment of their Enrollment Appointment through the Drop/Add Deadline Date.
Suggested Postmark to Meet Tuition/Fee Payment Deadlines
Tuition/Fee Payment Deadline - for registration from March 01, 2011 through August 07, 2011 for nonfinancial aid students and students that have not accepted any financial aid awards for this semester. For students with accepted financial aid no payment is due on this date.
Extended Hours 8am to 6pm at all registration locations
$\$ 50.00$ Late Registration Fee begins (does not apply to ASU Online students)
First Day of Classes
Late Registration \& Drop/Add Deadline
Residency Classification Petition Deadline
Tuition \& Fees 100\% Refund Deadline
Tuition and certain fees are subject to 100\% refund through (August 31, 2011) -
(applicable to classes held in sessions longer than eight weeks). Tuition and fees are nonrefundable thereafter and students are required to pay all tuition and fees for drops and withdrawals occurring on or after (September 1, 2011). Certain registration fees are nonrefundable on or after the first day of the semester. See the Tuition Refund Policy for additional information

## Labor Day Observed

University 21st Day
Academic Status Report \#1 (tentative)
Deadline for Appealing Residency Classification Decision
University 45th Day
Graduation Filing Deadline
Academic Status Report \#2 (tentative)
Course Withdrawal Deadline - In Person \& Online
Veterans Day Observed
Thanksgiving Holiday Observed
Complete Withdrawal Deadline -Online \& In Person
Beginning the first day of classes (for fall and spring semesters), undergraduate students are required to work
with a Student Retention Coordinator to facilitate the withdrawal process or to explore other potential options. For more information on Complete Withdrawals, please contact the University Registrar's Office
at studentretention@asu.edu or 480.965.0493.
Last Day of Classes and Last Day to Process Transactions
Reading Day
Final Exams
Commencement Ceremony for Graduate Students
Commencement Ceremony for Undergraduate Students
Degree Conferral Date
Final Grades Due
End of Semester Processing
Holiday Break

Arizona State University Registration Sites:

| Downtown Phoenix | University Center Bldg., (UCENT) Suite 130 | $602-496-4372$ |
| :--- | :--- | ---: |
| Polytechnic | (QUAD 2) | $480-727-1142$ |
| Tempe | Student Services Bldg., (SSV) Room 140 | $480-965-3124$ |
| West | University Center Bldg., (UCB) Room 120 | $602-543-8203$ |

All dates are tentative and subject to change without notice. Drop/withdrawal deadlines are based on a regular 16-week term.
If a class is scheduled in a session that is less than 16 weeks, the deadlines are prorated.
Dates shaded indicate changes or updates since the last published date of the semester calendar. This document is updated and published on the web at http://students.asu.edu/registrar-semester-calendar

## Spring 2012 Semester Calendar

University Registrar's Office
Updated 5/27/2011

| General Calendar Dates |  |
| :---: | :---: |
| Schedule of Classes Available | Friday, November 4, 2011 (tentative) |
| Enrollment Appointments Begin | Monday, November 7, 2011 (tentative) |
| \$50.00 Late Registration Fee Begins (does not apply to ASU Online students) | Monday, December 26, 2011 |
| Residency Classification Petition Deadline | Wednesday, January 11, 2012 |
| Martin Luther King Jr. Holiday Observed - University closed | Monday, January 16, 2012 |
| Extended hours until 6pm - all registration sites | TBD |
| Tuition/Fee Payment Deadline | TBD |
| University 21st Day | Wednesday, January 25, 2012 |
| Deadline to Appeal Residency Classification Decision | Friday, February 10, 2012 |
| Spring Break | Monday-Sunday, March 19-25, 2012 |
| Deadline to Apply for Graduation | Wednesday, February 15, 2012 |
| Commencement Ceremony for Graduate Students | Wednesday, May 2, 2012 |
| Commencement Ceremony for Undergraduate Students | Thursday, May 3, 2012 |
| End of Semester Processing | TBD |
| Session A Classes meet Thursday, January 5 - Friday, February 24, 2012 |  |
| Classes Begin | Thursday, January 5, 2012 |
| Drop/Add Deadline | Friday, January 6, 2012 |
| Academic Status Report | TBD |
| Course Withdrawal Deadline | Wednesday, January 25, 2012 |
| Classes end | Friday, February 24, 2012 |
| Final Grades Due | Sunday, February 26, 2012 |
| Session B Classes meet Wednesday, February 29 - Tuesday, April 24, 2012 |  |
| Classes Begin | Wednesday, February 29, 2012 |
| Drop/Add Deadline | Thursday, March 1, 2012 |
| Academic Status Report | TBD |
| Course Withdrawal Deadline | Tuesday, March 20, 2012 |
| Classes end | Tuesday, April 24, 2012 |
| Final Grades Due | Thursday, April 26, 2012 |
| Semester C Classes meet Thursday, January 5 - Tuesday, April 24, 2012 <br>  Final exam period: Thursday April 26 - Wednesday, May 2, 2012 |  |
| Classes Begin | Thursday, January 5, 2012 |
| Drop/Add Deadline | Wednesday, January 11, 2012 |
| Academic Status Report \#1 | TBD |
| Academic Status Report \#2 | TBD |
| Course Withdrawal Deadline | Wednesday, March 28, 2012 |
| Classes end | Tuesday, April 24, 2012 |
| Reading Day | Wednesday, April 25, 2012 |
| Final Exams | Thursday, April 26 - Wednesday, May 2, 2012 |
| Final Grades Due | Saturday, April 28 - Monday, May 7, 2012 |

## Arizona State University Registration Sites:

| Downtown Phoenix | University Center Bldg., (UCENT) Suite 130 | (602) 496-4372 |
| :--- | :--- | :--- |
| Polytechnic | (QUAD 2) | (480) 727-1142 |
| Tempe | Student Services Bldg., (SSV) Room 140 | (480) 965-3124 |
| West | University Center Bldg., (UCB) Room 120 | (602) 543-8203 |

For detailed information about the changes to the academic calendar beginning spring 2012, please visit:
Student information: http://students.asu.edu/calendarchanges/students
Faculty information: http://students.asu.edu/calendarchanges/faculty
All dates are tentative and subject to change without notice.
Dates in yellow indicate changes or updates since the last published date of the semester calendar.
This document is updated and published on the web at http://students.asu.edu/registrar-semester-calendar

## Tuition and Fees

## Tuition Commitment

## Undergraduate Resident Tuition

Arizona State University is committed to providing undergraduate resident students with reasonable tuition rates while they earn their degree. Degree-seeking undergraduate students are automatically assigned to a tuition cohort [2] upon admission or readmission and do not need to take any action to benefit from the commitment tuition rate.
The commitment tuition rate [2] applicable to each tuition cohort is initially equal to the approved tuition rate [2] at the time of admission or readmission. Any future increases in tuition will be based off of this rate until the tuition commitment period [2] expires. Undergraduate resident students not eligible for the commitment tuition rate include non-degree seeking students, students enrolled in six or fewer credit hours, and students whose commitment period has expired. Ineligible students will pay the most recently approved tuition rate.

- Commitment Tuition Rate [3]
- Commitment Period [4]
- Commitment Tuition Rate Definitions [2]
- Commitment Tuition Rate FAQs [5]

Note: Continuation of the commitment tuition rate assumes no unusual levels of inflation and no substantial change in the levels of state support. Tuition and fee information provided here or in other University publications or web pages represent tuition and fees as currently approved. However, Arizona State University reserves the right to increase or modify tuition and fees without prior notice, upon approval by the Arizona Board of Regents or as otherwise consistent with Board policy and to make such modifications applicable to students enrolled at ASU at that time as well as to incoming students. In addition, all tuition amounts and fees are subject to change at any time for correction of errors. Finally, please note that fee amounts billed for any period may be adjusted at a future date.

Source URL: http://students.asu.edu/node/2279
Links: [1] http://students.asu.edu/taxonomy/term/173
[2] http://students.asu.edu/node/2282
[3] http://students.asu.edu/node/2280
[4] http://students.asu.edu/node/2281
[5] http://students.asu.edu/node/2283

## Commitment Tuition Rate

## Undergraduate Resident Tuition

The commitment tuition rate [2] applicable to each tuition cohort [2] is initially equal to the approved tuition rate at the time of admission or readmission. Any future increases in tuition will be based off of this rate until the tuition commitment period [2] expires. Undergraduate degree seeking resident students are automatically assigned to a tuition cohort upon admission or readmission and do not need to take any action to benefit from the commitment tuition rate.

## Degree-Seeking

The commitment tuition rate applies to undergraduate degree seeking resident students. Undergraduate resident students not seeking a degree will pay the most recently approved tuition rate and are subject to all future tuition increases.

## Full-time Enrollment for Tuition Purposes

The commitment tuition rate applies for fall/spring semesters during the commitment period in which enrollment exceeds six credit hours. Undergraduate degree seeking resident students enrolled in six or fewer credit hours are billed the most recently approved tuition rate. The commitment period is not extended for part-time enrollment.

## Residency Status

The commitment tuition rate is applicable to undergraduate students classified as residents for tuition purposes. If an undergraduate student is reclassified from nonresident to resident for tuition purposes, the commitment tuition rate and commitment period are determined based upon the original semester of admission as a nonresident student.

## Community College Transfer Students in Pathway Programs

Students may be eligible for the commitment tuition rate if they are:

- Admitted to ASU as a resident, degree-seeking student, and;
- Enrolled in one of these partnership programs:
- Maricopa-ASU Pathways Program (MAPP)
- Transfer Admission Guarantee (TAG), or;
- RN-BSN pathway program

The commitment tuition rate is based on the semester the student enrolls for one of these pathway programs, if at the time of admission to ASU the student is in compliance with the pathway requirements. Upon expiration of the commitment period, students revert to paying the most recently approved tuition rate. The commitment ends upon the earlier of these circumstances: (1) expiration of the five-year commitment period determined at the time of pathway enrollment, up to a maximum of three years from initial enrollment at ASU, (2) upon graduation from ASU, or (3) withdrawal from the university. Note: Students admitted to ASU in accordance with transfer protocols other than these pathway programs will be billed for tuition in accordance with the policies applicable to transfer students.

Readmission The commitment tuition rate is based upon the most recent semester of undergraduate degree admission or readmission. Students required to apply for readmission are assigned to a new tuition cohort and are billed for the commitment tuition rate applicable for the new cohort. The commitment tuition rate associated with the original semester of admission is not maintained under any circumstances, including military service, illness, or church mission, unless an official Leave of Absence is granted by the University Registrar's Office. Students must apply for a Leave of Absence to maintain their original semester of admission for purposes of assignment to a tuition cohort and determination of the commitment tuition rate. The commitment period is not extended by the Leave of Absence and the commitment tuition rate continues to increase.

Expiration of Commitment Period Upon expiration of the commitment period students revert to paying the most recently approved tuition rate. The commitment period ends upon the earlier of the expiration of the commitment period determined at the time of admission, upon graduation, or upon application for admission or readmission.

Students Admitted Prior to Summer 2008 For undergraduate degree seeking resident students admitted prior to summer 2008 the commitment tuition rate is based upon fall 2007 tuition regardless of semester of admission. This initial tuition commitment tuition rate will remain in tact during the commitment period, and any increases in tuition will be based off this rate. Starting in fall 2009, the remaining commitment period [2] will be determined based upon the most recent semester of undergraduate degree admission or readmission and prior earned credits at the time of admission. For example, a student admitted as a sophomore fall 2006 is eligible for a remaining commitment of one year in fall 2009. Beginning in fall 2010, because the commitment period has expired, the student admitted as a sophomore in fall 2006 will pay the most recently approved tuition rate.

Differential Tuition, Program Tuition and Other Fees The commitment tuition rate only applies to base undergraduate resident tuition. The tuition commitment does not apply to differential tuition, program tuition, mandatory registration fees, or any other charges assessed by ASU.

Summer Session Tuition The commitment tuition rate is not applicable for summer registration. All students are billed at the same rate, which is equal to the most recently approved per credit hour rate.

Special Nonresident Tuition Rates Students eligible for special nonresident tuition rates that are based upon resident tuition are not eligible for the commitment tuition rate. Nonresident students eligible for special tuition rates will be billed based upon the most recently approved tuition rate and are subject to all future tuition increases. Note: Continuation of the commitment tuition rate assumes no unusual levels of inflation and no substantial change in the levels of state support. Tuition and fee information provided here or in other University publications or web pages represent tuition and fees as currently approved. However, Arizona State University reserves the right to increase or modify tuition and fees without prior notice, upon approval by the Arizona Board of Regents or as otherwise consistent with Board policy and to make such modifications applicable to students enrolled at ASU at that time as well as to incoming students. In addition, all tuition amounts and fees are subject to change at any time for correction of errors. Finally, please note that fee amounts billed for any period may be adjusted at a future date.

Source URL: http://students.asu.edu/tuition/commitment
Links: [1] http://students.asu.edu/taxonomy/term/173 [2] http://students.asu.edu/node/2282

## Commitment Tuition Rate Definitions

## Undergraduate Resident Tuition

Approved Tuition Rate: Undergraduate resident tuition rate approved for each tuition cohort. Non-degree seeking students, students enrolled in six or fewer credit hours, and students whose commitment period has expired will also pay the most recently approved tuition rate.

Commitment Tuition Rate: Full-time undergraduate resident tuition rate applicable to each tuition cohort, based on the approved per credit hour tuition rate at the time of admission or readmission. Increases in tuition will be based off of the initial tuition rate until the commitment period expires. Full-time undergraduate resident tuition is assessed for enrollment in more than six credit hours during the fall/spring semester.

Commitment Period: Period of up to five years, as determined by academic level [2] upon admission or readmission and prorated based upon prior earned credits.

Prior Earned Credits: All credit hours earned prior to semester of admission. Includes hours earned at ASU, other institutions, through testing, or by any other means.

Tuition Cohort: All undergraduate degree-seeking students admitted or readmitted for a given fall semester. Students admitted during the preceding summer semester and the following winter session or spring semester are assigned to the fall semester tuition cohort. If students are admitted to multiple programs, the admit semester of the student's active primary academic program will determine the tuition cohort.

Note: Continuation of the commitment tuition rate assumes no unusual levels of inflation and no substantial change in the levels of state support. Tuition and fee information provided here or in other University publications or web pages represent tuition and fees as currently approved. However, Arizona State University reserves the right to increase or modify tuition and fees without prior notice, upon approval by the Arizona Board of Regents or as otherwise consistent with Board policy and to make such modifications applicable to students enrolled at ASU at that time as well as to incoming students. In addition, all tuition amounts and fees are subject to change at any time for correction of errors. Finally, please note that fee amounts billed for any period may be adjusted at a future date.

Source URL: http://students.asu.edu/node/2282
Links: [1] http://students.asu.edu/taxonomy/term/173
[2] http://students.asu.edu/glossary/term/2

## Residency for Tuition Purposes

Under Arizona state law, an applicant or enrolled student is classified either as a resident of Arizona, a nonresident or foreign student. The term "Arizona resident" for admissions or tuition purposes may differ from other definitions of Arizona residency. A person who has an Arizona driver license, or who is an Arizona resident for tax, voting or other purposes, may not necessarily be considered a resident for tuition purposes.
International students that are entitled to reside permanently in the U.S. may be eligible for in-state status classification at the university. Additional information can be found under the Visa Types section of this page.
Arizona law requires that students who are classified in-state for tuition purposes, or are receiving aid that is funded in part or in whole by state money, provide verification of citizenship, permanent residency or other lawful immigration status. See Citizenship/Lawful Presence [2] for additional information.

## INFORMATION REGARDING RESIDENCY CLASSIFICATION IS SUBJECT TO CHANGE WITHOUT NOTICE.

## General Information

Residency classification for tuition purposes at ASU is a benefit reserved for Arizona residents who have met the requirements as established by state law and the Arizona Board of Regents (ABOR) policy. There are no exceptions granted due to unusual circumstances or financial hardship. That is, Arizona residency is not a scholarship or waiver.

## Step 1: Determine Your Classification Category

Residency classiication is based on the information from your admission application. If you are classified as a nonresident and wish to be reclassified as a resident, it may be necessary to submit additional documentation. Please read through the Residency Reclassification Survey [3] to determine what documentation you may need to submit.

Step 2: Initiate Your Residency Petition or Verification form
Submit the appropriate residency petition form (see the Residency Reclassification Survey [3] or the Classification Categories [4] page for additional information) along with your $\$ 50.00$ non-refundable petition fee to the Residency Classification Office, if required.
**Note: Verification categories do not require the submission of the $\$ 50.00$ fee.

## Step 3: The Petition Process

The Residency Classification Office may also request additional documentation after the initial review of your application.
Applications and accompanying documentation will be retained by Arizona State University in accordance with university approved requirements. All information will be kept confidential as required by law and university policies. In making residency determinations, the university considers all information provided in or with an application, as well as any other available information relevant to the application. Decisions to approve a residency application are made when the applicant has presented clear and convincing evidence that a permanent domicile in the state of Arizona has been established.
NOTE: A $\mathbf{\$ 5 0 . 0 0}$ non-refundable fee needs to be received with the submission of a reclassification petition before it can be marked as complete and evaluated.

## Step 4: The Petition Decision

Processing time for a completed petition is approximately 4-6 weeks. For petitioners wanting a residency decision prior to the tuition/fee payment deadline, it is suggested that the completed petition, including the $\$ 50.00$ fee and all required documents, be submitted at least four weeks prior to the first tuition/fee payment deadline. A petition will not be considered complete until all requested documents have been submitted to the Residency Classification Office.
If you submitted a petition for reclassification and were denied by the Residency Classification Office, you have the right to request an appeal of that decision.

## Warning: Misrepresentation or falsification of information can be costly.

Students are expected to be honest with all information presented in connection with the petition process, and by submitting a notarized petition, confirm that all information is true and complete. Students who petition for reclassification subscribe and swear to the following statement:
"All statements, information, and evidence presented are true and complete. I understand that if I provide false information, if I make a material misrepresentation or omission in connection with my Petition for Change of Residency, or if I make any effort to fraudulently claim Arizona as my state of legal domicile, it will jeopardize my case for residency and subject me to disciplinary action, dismissal for the University...and may result in civil and criminal liability. I hereby grant permission for ASU representatives to verify any supporting evidence submitted with this petition."
Petitioners who have omitted, falsified or misrepresented any information will be referred to Student Judicial Affairs [5] for disciplinary action.

## Deadlines

Students may submit a petition for residency according to the following schedule:

| Term | Residency Petition Deadline Dates | Residency Appeal Deadline Dates* <br> *must have already submitted a petition and received a denial <br> Spring 2011 |
| :--- | :--- | :--- |
| November 1, 2010 - January 21, 2011 | February 25, 2011 |  |
| Summer I 2011 | April 1 - June 1, 2011 | July 6, 2011 |
| Summer II 2011 | April 1 - July 6, 2011 | August 10, 2011 |
| Fall 2011 | April 1 - August 24, 2011 | September 28, 2011 |

The deadline dates listed above are firm. Per ABOR requirements, failure to submit a notarized petition by the deadline date constitutes a waiver of the right to petition for that term. Petitions received after the deadline will be denied. Appeals will not be accepted for petitions submitted after the deadline.

## Resources

## Complete tuition/admission residency regulations for the state of Arizona can be found at the following websites:

Arizona Board Of Regents (ABOR) Policy Manual, Section B: Tuition Classification - Chapter 4 [6] Arizona Revised Statues - Title 15 [7] (A.R.S. 15-1801 to 1807)

## Citizenship/Lawful Presence Requirement

Arizona law requires that students who are seeking consideration for in-state tuition status or aid that is funded in part or in whole
by state money provide verification of citizenship, permanent residency or other lawful immigration status. If you are already classified as a resident to tuition purposes and you still need to verify your status, please go to Citizenship/Lawful Presence [2] for additional information.

## Financial Aid and Residency Eligibilty

If you have a change in residency your financial aid will be reduced and institutional scholarships will be adjusted or cancelled. Students will be responsible for paying any resulting charges on thier student account. Check with Student Finanical Assistance [8] in order to determine how these changes will affect your award(s). In the event of a financial aid adjustment, you will be notified by email to check My ASU for new award information.

## Visa Types And Residency Eligibility

Visa Types and Residency Eligibility List [9]
Among non-U.S. citizens, only persons who are entitled to reside permanently in the U.S. are eligible for in-state status classification at the university. These individuals, like U.S. citizens, must still prove that they have established domicile in Arizona as defined in Arizona Board of Regent's policy. In other words, having the privilege of remaining permanently in the U.S. is a necessary, but not a sufficient, condition to obtaining in-state classification at the university. At present, non-citizens who are entitled to reside permanently in the U.S. and are eligible for the benefit of in-state tuition at Arizona State University.
Students must clearly and convincingly prove that they are permanent residents of Arizona. A temporary, non-immigrant visa will not allow a person to obtain a permanent status in Arizona regardless of the length of the visa or the number of times it is renewed. Continuing eligibility to remain classified as a resident student for tuition purposes depends upon the continued maintenance of eligible immigration status. Students that change to a non-eligible classification status may be changed to a status of non-resident. Students with eligible classifications (see the Visa Types \& Residency Eligibility List [9]) who feel they may qualify for a change in status should contact the Residency Classification Office at 480-965-7712 for more information.

NOTE: This information has been compiled and approved via university policies and procedures.

Source URL: http://students.asu.edu/residency
Links: [1] http://students.asu.edu/taxonomy/term/164
[2] http://students.asu.edu/statusverification
[3] http://students.asu.edu/residencyreclassificationsurvey
[4] http://students.asu.edu/node/1102
[5] http://www.asu.edu/studentaffairs/studentlife/judicial/index.htm
[6] https://azregents.asu.edu/rrc/Policy\ Manual/4Section_B\ -\ Tuition\ Classification\ -\ Chapter\ 4.pdf
[7] http://www.azleg.gov/ArizonaRevisedStatutes.asp?Title=15
[8] http://students.asu.edu/contact/financialaid
[9] http://students.asu.edu/node/1115

## Tuition and Fee Descriptions

ASU tuition and fees are approved annually by the Arizona Board of Regents. In addition to resident and nonresident tuition, commonly billed tuition and fees include:

## Differential Tuition and Program Tuition

Certain colleges and programs assess additional differential and program tuition as approved by the Arizona Board of Regents. Visit the Tuition and Fees Schedules [2] for college and program specific tuition and fees.

## Excess Hours Tuition

The Arizona Legislature enacted legislation in 2005 (A.R.S. § 15-1626) that establishes credit hour thresholds for undergraduate students who attend a public university in Arizona. Undergraduate students who enroll for credit hours beyond the applicable threshold are required to pay an Excess Hours Tuition Surcharge [3]. Students who have more than 145 credit hours will be assessed the Undergraduate Excess Hours Tuition Surcharge.

## Special Class Fees

Special Class fees are assessed based on enrollment in specific classes. Class fees are published with each class through Class Search [4].

## Technology Fee

The technology fee funds technology initiatives including expanding ASU's wireless network on all of its campuses, increasing the
number of technology-enabled classrooms, developing a system to allow students to access University-licensed software, reducing dependence on computing labs and expanding and improving online self-service environment. All students are assessed this mandatory technology fee as authorized by the Arizona Board of Regents.

## Late Registration Fee

All students who register beginning the week before the first day of the semester will be assessed a late registration fee of $\$ 50.00$, with the exception of students enrolling only in late start sessions. Students enrolling exclusively in late start sessions, will be assessed the late registration fee beginning one week before the session start date. Please see Tuition Deadlines [5] for specific dates. Registration after the published deadline may be permitted under extraordinary circumstances if approved by an authorized College designee. Late fees are not refundable.

## Recreation Fee

All students are assessed a recreation fee allowing access to recreation facilities on all four ASU Campuses. For more information, please visit Campus Recreation [6]. Faculty/staff who are also students are not assessed a recreation center fee with their other registration fees, but may pay an optional fee at faculty/staff rates.

## Student Service Facility Fee

The Student Service Facility Fee is a mandatory fee authorized by the Arizona Board of Regents to be charged to all students. This fee will allow for the enhancements of existing facilities and the planning and development of new student service facilities to meet the needs of the growing student population.

## Student Programs Fee

All students are assessed a mandatory program facility fee as authorized by the Arizona Board of Regents to provide funding for new or enhanced facilities and student support programming.

## Health and Wellness Fee

All students are assessed a Health and Wellness Fee as authorized by the Arizona Board of Regents to enhance services for students who seek both preventive and acute care and to expand outreach and wellness education and services.

## Financial Aid Trust Fee

Student Financial Aid Trust grants are assistance provided in partnership between ASU students and the state legislature. All students are assessed a mandatory financial aid trust fee as authorized by the Arizona Legislature to create a Financial Aid Trust Fund, from which Financial Aid Trust Grants are awarded under the usual aid eligibility criteria. Fees collected from students are matched by the State of Arizona. For more information, please visit the Financial Aid Trust Grant [7] website.

## Arizona Students' Association (ASA) Fee

The Arizona Students' Association is a nonprofit, higher education advocacy organization that represents Arizona public university students to the Arizona Board of Regents, State Legislature, and U.S. Congress. During 1996-1997, students at the state universities voted to change the mechanism for funding the ASA to a fee charged to each student each semester.
Any refunds for this fee will be provided through ASA Central Office at 1.877.294.6900 (toll free) or 602.294.6900. You may also pickup a refund form to complete from the ASASU Business Office (Tempe campus) in the Memorial Union Room 311 or Student Life (West campus) in UCB 221. The refund forms will be available for the first 21 days of classes.
For information about the Arizona Students' Association, visit www.azstudents.org [8].
6. Student Business Services

Source URL: http://students.asu.edu/tuitiondescriptions
Links: [1] http://students.asu.edu/taxonomy/term/173
[2] http://www.asu.edu/admissions/tuitionandfees/
[3] https://students.asu.edu/tuitionsurcharge
[4] https://www.asu.edu/go/classsearch/
[5] https://students.asu.edu/tuitiondeadlines
[6] http://src.asu.edu/
[7] https://students.asu.edu/financial-aid-trust-grant
[8] http://www.azstudents.org

## Tuition Refund Policy

Students are required to pay all tuition and fees for any registered course unless enrollment is officially cancelled during the $100 \%$
refund period. Tuition and fees are nonrefundable after the $100 \%$ refund period. All refunds are less any amounts owed to the university and are subject to payment holding periods.
Withdrawal or cancellation occurs on the calendar day that withdrawal is requested either Online or in person at a Registrar site. By registering for classes students agree to pay all applicable tuition and registration fees. The university provides a prorated refund for students receiving financial aid; therefore, the refund schedule is the minimum amount refundable to these students.

## Fall and Spring Semester Classes

The $100 \%$ refund period extends through the first two weeks of the semester for regular semester classes and sessions eight weeks or longer. The $100 \%$ refund period is one week for sessions shorter than eight weeks and for dynamically dated classes. For classes that begin prior to the first day of the regular semester, the applicable $100 \%$ refund period begins on the class start date not the semester start date. Students are required to pay tuition and fees owed for enrollment cancellations that occur after the refund period.

## Summer Session Classes

The $100 \%$ refund period is the first five days of the applicable summer session. Students are required to pay tuition and fees owed for enrollment cancellations that occur after the refund period.

## Winter Session Classes

Please visit Tuition Dates and Deadlines [2] for the Winter Session 100\% refund period. Students are required to pay tuition and fees owed for enrollment cancellations that occur after the refund period.

## Medical or Compassionate Withdrawals

Students withdrawing for medical circumstances or other extenuating circumstances must contact their college to initiate the process. Approved medical or compassionate withdrawals [3] are eligible for up to an $80 \%$ refund of tuition if approved within two years of the end of the semester. No tuition refund is provided thereafter.
For specific semester or session deadlines, please refer to Tuition Dates and Deadlines [2].
Source URL: http://students.asu.edu/tuitionrefundpolicy
Links: [1] http://students.asu.edu/taxonomy/term/173
[2] http://students.asu.edu/tuitiondeadlines
[3] http://students.asu.edu/forms/medical-compassionate-withdrawal-request

## Tuition and Fees Schedules

To view current year tuition and fees, please visit the Tuition and Cost Calculator [2].
To view historical information about tuition and fees, please visit Tuition and Fees Schedule [3].

NOTE: All amounts shown in the Tuition and Fees Schedules or in other university publications or Web pages represent tuition and fees as currently approved. However, Arizona State University reserves the right to increase or modify tuition and fees without prior notice, upon approval by the Arizona Board of Regents or as otherwise consistent with board policy, and to make such modifications applicable to students enrolled at ASU at that time as well as to incoming students. In addition, all tuition amounts and fees are subject to change at any time for correction of errors. Finally, please note that fee amounts billed for any period may be adjusted at a future date.

Tuition charges will be billed on your student account and may be viewed online through My ASU [4] after registration. See Billing [5] for information on how to pay your tuition and fees.

Tuition Installment Plan [6]: If tuition is not paid by the applicable tuition due date, or financial aid is not awarded and accepted by the due date, you will be automatically enrolled in the tuition installment plan and charged a nonrefundable enrollment fee. See Tuition Deadlines [7] for semester-specific information.

Thinking of Leaving ASU? By registering for classes, you agree to pay all applicable tuition and registration fees. If you plan to leave the university, you must officially withdraw to cancel registration before the refund deadline. Refund deadlines are available on the Tuition Deadlines [7] calendar. Please ensure that you have dropped or withdrawn from all classes during the 100 percent refund period or you will be responsible for the tuition charges. See the Tuition Refund Policy [8].

## IRS Form 1098-T

Arizona State University prepares an IRS form 1098-T, Tuition Tax Statement each calendar year. IRS form 1098-T reports amounts billed to you for qualified tuition and may assist you in the preparation of your tax return with regards to education tax benefits you may be eligible to claim. Read more about the IRS form 1098-T [9].

NOTE: All amounts shown in the Tuition and Fees Schedules or in other University publications or web pages represent tuition and fees as currently approved. However, Arizona State University reserves the right to increase or modify tuition and fees without prior notice, upon approval by the Arizona Board of Regents or as otherwise consistent with Board policy and to make such modifications applicable to students enrolled at ASU at that time as well as to incoming students. In addition, all tuition amounts and fees are subject to change at any time for correction of errors. Finally, please note that fee amounts billed for any period may be adjusted at a future date.

Source URL: http://students.asu.edu/tuitionandfees

## Links:

[1] http://students.asu.edu/taxonomy/term/173
[2] http://students.asu.edu/costs
[3] http://catalog.asu.edu/tuitionandfees
[4] http://my.asu.edu
[5] http://students.asu.edu/tuitionandbilling
[6] http://students.asu.edu/tuitioninstallmentplan
[7] http://students.asu.edu/tuitiondeadlines
[8] http://students.asu.edu/tuitionrefundpolicy
[9] http://students.asu.edu/form1098t

## Per Semester Tuition And Fees

Fall 2011 - Spring 2010 Program Specific Tuition and Fees
Certain Graduate and Undergraduate programs charge program specific tuition. Use the ASU Tuition and Cost of Attendance Estimator [1]to review program specific tuition and fees.

## General Tuition and Fees

Undergraduate Degree Programs: Downtown Phoenix Campus and, Tempe Campus

| RESIDENT <br> Commitment Period Expired* |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | \& Over |
| Resident Undergraduate Tuition ${ }^{(1)}$ | $\$ 658$ | $\$ 1,316$ | $\$ 1,974$ | $\$ 2,632$ | $\$ 3,290$ | $\$ 3,948$ | $\$ 4,604$ |  |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 |  |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |  |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |  |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 |  |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 |  |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |  |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 |  |
| Total Undergraduate Resident Tuition \& Fees ${ }^{(2)(3)(4)(5)(6)} \$ 811$ | $\$ 1,469$ | $\$ 2,127$ | $\$ 2,785$ | $\$ 3,443$ | $\$ 4,101$ | $\$ 4,860$ |  |  |


| RESIDENT | ENROLLED HOURS |
| :--- | :--- |

Admitted Summer 2007 through Spring 2008*

| Commitment Period Not Expired* |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 \& Over |
| Resident Undergraduate Tuition ${ }^{(1)}$ | \$658 | \$1,316 | \$1,974 | \$2,632 | \$3,290 | \$3,948 | \$3,924 |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Assoc. Students of AZ |  | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Undergraduate Resident Tuition \& Fees ${ }^{(2)(3)}$ <br> (4) (5) (6) | \$811 | \$1,469 | \$2,127 | \$2,785 | \$3,443 | \$4,101 | \$4,180 |


| RESIDENT <br> Admitted Summer 2008 through Spring 2009* <br> Commitment Period Not Expired* |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | ENROLLED HOURS |  |  |  |  |  |  |
| Resident Undergraduate Tuition | 1 | 2 | 3 | 4 | 5 | 6 | 7 \& Over |
| Technology Fee | $\$ 658$ | $\$ 1,316$ | $\$ 1,974$ | $\$ 2,632$ | $\$ 3,290$ | $\$ 3,948$ | $\$ 4,114$ |
| Student Service Facility Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Programs Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |
| Health \& Wellness Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 40 |
| Recreation Fee | 20 | 20 | 20 | 20 | 20 | 20 | 39 |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Undergraduate Resident Tuition \& Fees ${ }^{(2)(3)(4)(5)(6)}$ | $\$ 811$ | $\$ 1,469$ | $\$ 2,127$ | $\$ 2,785$ | $\$ 3,443$ | $\$ 4,101$ | $\$ 4,370$ |


| RESIDENT <br> Admitted Summer 2009 through Spring 2010* <br> Commitment Period Not Expired* | ENROLLED HOURS |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 \& Over |
| Resident Undergraduate Tuition | $\$ 658$ | $\$ 1,316$ | $\$ 1,974$ | $\$ 2,632$ | $\$ 3,290$ | $\$ 3,948$ | $\$ 4,281$ |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |


| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
|  <br> Fees <br>  <br> $(2)$ (3) (4) (5) (6) | $\$ 811$ | $\$ 1,469$ | $\$ 2,127$ | $\$ 2,785$ | $\$ 3,443$ | $\$ 4,101$ | $\$ 4,537$ |


| RESIDENT <br> Admitted Summer 2010 through Spring 2011* | ENROLLED HOURS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 \& Over |
| Resident Undergraduate Tuition ${ }^{(1)}$ | \$658 | \$1,316 | \$1,974 | \$2,632 | \$3,290 | \$3,948 | \$4,517 |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Undergraduate Resident Tuition \& Fees ${ }^{(2)(3)}$ (4) (5) (6) | \$811 | \$1,469 | \$2,127 | \$2,785 | \$3,443 | \$4,101 | \$4,773 |


| RESIDENT <br> Admitted Summer 2011 through Spring 2012* | ENROLLED HOURS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 |  | 4 | 5 | 6 | 7 \& Over |
| Resident Undergraduate Tuition ${ }^{(1)}$ | \$658 | \$1,316 | \$1,974 | \$2,632 | \$3,290 | \$3,948 | \$4,604 |
| Technology Fee |  | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Undergraduate Resident Tuition \& Fees ${ }^{(2)(3)(4)(5)(6)}$ | \$811 | \$1,469 | \$2,127 | \$2,785 | \$3,443 | \$4,101 | \$4,860 |


| NON-RESIDENT | ENROLLED HOURS |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 |  | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 \& Over |
| Non-Resident Undergraduate Tuition ${ }^{(1)}$ | \$909 | \$1,818 | \$2,727 | \$3,636 | \$4,545 | \$5,454 | \$6,363 | \$7,272 | \$8,181 | \$9,090 | \$9,999 | \$10,904 |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 | 75 | 75 | 75 | 75 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 | 25 | 25 | 25 | 25 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 | 40 | 40 | 40 | 40 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 | 39 | 39 | 39 | 39 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 | 25 | 25 | 25 | 25 | 25 |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Undergraduate Non-Resident Tuition \& Fees ${ }^{(2)(3)(4)(5)(6)}$ | \$1,062 | \$1,971 | $\$ 2,880$ | $\$ 3,789$ | $\$ 4,698$ | $\$ 5,607$ | $\$ 6,619$ | $\$ 7,528$ | \$8,437 | \$9,346 | \$10,255 | \$11,160 |

*The ASU Tuition Commitment is that full-time undergraduate resident tuition will increase at a reasonable rate from the semester of admission or readmission. For more information about the Tuition Commitment and the Commitment Period please refer to students.asu.edu/tuitionandfees
${ }^{(1)}$ Resident tuition for enrollment in 7 hours or more is a \$1 less during Spring semester. The Financial Aid Trust fee is $\$ 1$ less during Spring semester fro enrollment in less than 7 hours.
${ }^{(2)}$ Music Fees \& Special Class Fees are dependent on specific class enrollment and are not included here. Fees are available online through Class Search.
${ }^{(3)}$ Undergraduate students with total credit hours in excess of the threshold established by the Arizona Legislature are required to pay tuition on these excess hours. For resident students the excess hours tuition is $\$ 132$ per credit hour up to a maximum of $\$ 924$ for enrollment in 7 or more hours. For nonresident students the excess hours tuition is $\$ 182$ per credit hour up to a maximum of $\$ 2,184$ for enrollment in 12 or more credit hours. See students.asu.edu/tuitionandfees[2] for additional information regarding the Undergraduate Excess Hours Tuition.
${ }^{(4)}$ If you have been admitted to the Barrett Honors College, an honors fee of $\$ 500$ for incoming freshmen and $\$ 450$ for continuing students will be assessed each fall and spring semester, in addition to tuition and fees presented above.
${ }^{(5)}$ All amounts shown in the Tuition and Fees Schedules or in other University publications or web pages represent tuition and fees as currently approved. However, Arizona State University reserves the right to increase or modify tuition and fees without prior notice, upon approval by the Arizona Board of Regents or as otherwise consistent with Board policy and to make such modifications applicable to students enrolled at ASU at that time as well as to incoming students. In addition, all tuition amounts and fees are subject to change at any time for correction of errors. Finally, please note that fee amounts billed for any period may be adjusted at a future date.
${ }^{(6)}$ Some graduate and undergraduate programs assess an additional program fee. These fees differ according to the college and or program.

Undergraduate Degree Programs: Polytechnic Campus and, West Campus

| RESIDENT <br> Admitted Prior to Summer 2008 <br> Commitment Period Expired* | ENROLLED HOURS |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 \& Over |  |
| Resident Undergraduate Tuition |  |  |  |  |  |  |  |  |
| (1) | $\$ 658$ | $\$ 1,316$ | $\$ 1,974$ | $\$ 2,632$ | $\$ 3,290$ | $\$ 3,948$ | $\$ 4,604$ |  |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 |  |


| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Undergraduate Resident Tuition \& Fees ${ }^{(2)(3)(4)(5)(6)}$ | $\$ 811$ | $\$ 1,469$ | $\$ 2,127$ | $\$ 2,785$ | $\$ 3,443$ | $\$ 4,101$ | $\$ 4,860$ |


| RESIDENT <br> Admitted Prior to Summer 2008 | ENROLLED HOURS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2 | 3 | 4 | 5 | 6 | 7 \& Over |
| Resident Undergraduate Tuition ${ }^{(1)}$ | \$658 | \$1,316 | \$1,974 | \$2,632 | \$3,290 | \$3,948 | \$3,786 |
| Technology Fee | 50 | 50 | 50 |  | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 |  | 2 |
| Total Undergraduate Resident Tuition \& Fees ${ }^{(2)(3)(4)(5)(6)}$ | \$811 | \$1,469 | \$2,127 | \$2,785 | \$3,443 | \$4,101 | \$4,042 |


| RESIDENT <br> Admitted Summer 2008 Through Spring 2009* | ENROLLED HOURS |  |  |  |  |  | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| RESIDENT <br> Admitted Summer 2009 Through Spring 2010* | ENROLLED HOURS |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 \& Over |
| Resident Undergraduate Tuition ${ }^{(1)}$ | $\$ 658$ | $\$ 1,316$ | $\$ 1,974$ | $\$ 2,632$ | $\$ 3,290$ | $\$ 3,948$ | $\$ 4,281$ |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Undergraduate Resident Tuition \& Fees ${ }^{(2)(3)(4)(5)(6)}$ | $\$ 811$ | $\$ 1,469$ | $\$ 2,127$ | $\$ 2,785$ | $\$ 3,443$ | $\$ 4,101$ | $\$ 4,537$ |


| RESIDENT <br> Admitted Summer 2010 Through Spring 2011* |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | ENROLLED HOURS |  |  |  |  |  |  |
| Resident Undergraduate Tuition ${ }^{(1)}$ | 1 | 2 | 3 | 4 | 5 | 6 | 7 \& Over |
| Technology Fee | $\$ 658$ | $\$ 1,316$ | $\$ 1,974$ | $\$ 2,632$ | $\$ 3,290$ | $\$ 3,948$ | $\$ 4,517$ |
| Student Service Facility Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Programs Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |
| Health \& Wellness Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 40 |
| Recreation Fee | 20 | 20 | 20 | 20 | 20 | 20 | 39 |
| Assoc. Students of AZ | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Total Undergraduate Resident Tuition \& Fees ${ }^{(2)(3)(4)(5)(6)}$ | $\$ 811$ | $\$ 1,469$ | $\$ 2,127$ | $\$ 2,785$ | $\$ 3,443$ | $\$ 4,101$ | $\$ 4,773$ |


| RESIDENT <br> Admitted Summer 2011 Through Spring 2012* | ENROLLED HOURS |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 \& Over |
| Resident Undergraduate Tuition ${ }^{(1)}$ | $\$ 658$ | $\$ 1,316$ | $\$ 1,974$ | $\$ 2,632$ | $\$ 3,290$ | $\$ 3,948$ | $\$ 4,604$ |  |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 |  |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |  |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |  |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 |  |


| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Undergraduate Resident Tuition \& Fees ${ }^{(2)(3)(4)(5)(6)}$ | $\$ 811$ | $\$ 1,469$ | $\$ 2,127$ | $\$ 2,785$ | $\$ 3,443$ | $\$ 4,101$ | $\$ 4,860$ |


| NON-RESIDENT | ENROLLED HOURS |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | $12 \&$ Over |
| Non-Resident Undergraduate Tuition ${ }^{(1)}$ | \$909 | \$1,818 | \$2,727 | \$3,636 | \$4,545 | \$5,454 | \$6,363 | \$7,272 | \$8,181 | \$9,090 | \$9,999 | \$10,904 |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 | 75 | 75 | 75 | 75 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 | 25 | 25 | 25 | 25 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 | 40 | 40 | 40 | 40 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 | 39 | 39 | 39 | 39 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 | 25 | 25 | 25 | 25 | 25 |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Undergraduate Non-Resident Tuition \& Fees ${ }^{(2) ~(3) ~(4) ~(5) ~(6) ~}$ | \$1,062 | \$1,971 | $1 \$ 2,860$ | \$3,789 | \$4,698 | \$5,607 | \$6,619 | \$7,528 | \$8,437 | \$9,346 | \$10,255 | \$11,160 |

*The ASU Tuition Commitment is that full-time undergraduate resident tuition will increase at a reasonable rate from the semester of admission or readmission. For more information about the Tuition Commitment and the Commitment Period please refer tostudents.asu.edu/tuitionandfees
${ }^{(1)}$ Resident tuition for enrollment in 7 hours or more is a $\$ 1$ less during Spring semester. The Financial Aid Trust fee is $\$ 1$ less during Spring semester for enrollment in less than 7 hours.
${ }^{(2)}$ Music Fees \& Special Class Fees are dependent on specific class enrollment and are not included here. Fees are available online through Class Search.
${ }^{(3)}$ Undergraduate students with total credit hours in excess of the threshold established by the Arizona Legislature are required to pay tuition on these excess hours. For resident students the excess hours tuition is $\$ 132$ per credit hour up to a maximum of $\$ 924$ for enrollment in 7 or more hours. For nonresident students the excess hours tuition is $\$ 182$ per credit hour up to a maximum of $\$ 2,184$ for enrollment in 12 or more credit hours. See students.asu.edu/tuitionandfees for additional information regarding the Undergraduate Excess Hours Tuition.
${ }^{(4)}$ If you have been admitted to the Barrett Honors College, an honors fee of $\$ 500$ for incoming freshmen and $\$ 450$ for continuing students will be assessed each fall and spring semester, in addition to tuition and fees presented above
${ }^{(5)}$ All amounts shown in the Tuition and Fees Schedules or in other University publications or web pages represent tuition and fees as currently approved. However, Arizona State University reserves the right to increase or modify tuition and fees without prior notice, upon approval by the Arizona Board of Regents or as otherwise consistent with Board policy and to make such modifications applicable to students enrolled at ASU at that time as well as to incoming students. In addition, all tuition amounts and fees are subject to change at any time for correction of errors. Finally, please note that fee amounts billed for any period may be adjusted at a future date.
${ }^{(6)}$ Some graduate and undergraduate programs assess an additional program fee. These fees differ according to the college and or program.

## Undergraduate Non-Degree Programs: All Campuses

| RESIDENT | ENROLLED HOURS |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 \& Over |  |
| Resident Undergraduate Tuition ${ }^{(1)}$ | $\$ 658$ | $\$ 1,316$ | $\$ 1,974$ | $\$ 2,632$ | $\$ 3,290$ | $\$ 3,948$ | $\$ 4,604$ |  |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 |  |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |  |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |  |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 |  |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 |  |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |  |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 |  |
| Total Undergraduate Resident Tuition \& Fees ${ }^{(2)(3)(4)(5)(6)}$ | $\$ 811$ | $\$ 1,468$ | $\$ 2,127$ | $\$ 2,785$ | $\$ 3,443$ | $\$ 4,101$ | $\$ 4,860$ |  |


| NON-RESIDENT | ENROLLED HOURS |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | $\begin{aligned} & 12 \& \\ & \text { Over } \end{aligned}$ |
| Non-Resident Undergraduate Tuition ${ }^{(1)}$ | \$909 | \$1,818 | \$2,727 | \$3,636 | \$4,545 | \$5,454 | \$6,363 | \$7,272 | \$8,181 | \$9,090 | \$9,999 | \$10,904 |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 | 75 | 75 | 75 | 75 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 | 25 | 25 | 25 | 25 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 | 40 | 40 | 40 | 40 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 | 39 | 39 | 39 | 39 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 | 25 | 25 | 25 | 25 | 25 |
| Assoc. Students of AZ |  | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Undergraduate Non-Resident Tuition \& Fees ${ }^{(2)(3)(4)(5)(6)}$ | \$1,062 | \$1,971 | \$2,860 | \$3,789 | \$4,698 | \$5,607 | \$6,619 | \$7,528 | \$8,437 | \$9,346 | \$10,255 | \$11,160 |

[^1]applicable to students enrolled at ASU at that time as well as to incoming students. In addition, all tuition amounts and fees are subject to change at any time for correction of errors. Finally, please note that fee amounts billed for any period may be adjusted at a future date.
${ }^{(6)}$ Some graduate and undergraduate programs assess an additional program fee. These fees differ according to the college and or program.

## Undergraduate Degree Programs: Online

|  | ENROLLED HOURS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Resident Undergraduate Online Tuition | \$425 | \$850 | \$1,275 | \$1,700 | \$2,125 | \$2,550 | \$2,975 | \$3,400 | \$3,825 | \$4,250 | \$4,675 | \$5,100 | \$5,525 | \$5,950 | \$6,375 | \$6,800 | \$7,225 | \$7,650 |
| Technology Fee | 50 | 50 |  | $50$ | $50$ | $50$ | $50$ | $50$ | $50$ | $50$ | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student <br> Programs Fee | 0 | $0$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Student <br> Service Facility Fee | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Health \& Wellness Fee | 0 | 0 | 0 | 0 | 0 | 0 | $0$ | $0$ | 0 | 0 | $0$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Financial Aid Trust ${ }^{(2)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 |
| Recreation Fee | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Assoc. <br> Students of AZ | 2 | $2$ | $2$ | $2$ | 2 | $2$ | $2$ | $2$ | $2$ | $2$ |  | $2$ | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Resident Undergraduate Online Tuition \& Fees ${ }^{(1)(3)}$ (4) (5) (6) (7) | $\$ 497$ | $7 \$ 922$ | $\$ 1,347$ | $\$ 1,772$ | $\$ 2,197$ | $\$ 2,622$ | $\$ 3,066$ | $\$ 3,491$ | $\$ 3,916$ | $\|\$ 4,341\|$ | $\$ 4,766$ | $\$ 5,191$ | $\$ 5,616$ | $\$ 6,041$ | $\|\$ 6,466\|$ | $\$ 6,891$ | $\$ 7,316$ | $\$ 7,741$ |


| NON-RESIDENT | ENROLLED HOURS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Non-Resident Undergraduate Online Tuition | \$425 | \$850 | \$1,275 | \$1,700 | \$2,125 | \$2,550 | \$2,975 | \$3,400 | \$3,825 | \$4,250 | \$4,675 | \$5,100 | \$5,525 | \$5,950 | \$6,375 | \$6,800 | $\$ 7,225$ | \$7,650 |
| Technology Fee | 50 | 50 | 50 | $50$ | 50 | $50$ |  | $50$ |  | $50$ |  | $50$ | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Programs Fee | 0 | 0 | 0 | $0$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Student Service Facility | $0$ | $0$ | 0 | $0$ | $0$ | $0$ | $0$ | $0$ | $0$ | $0$ | $0$ | $0$ | $0$ | $0$ |  | 0 | 0 | 0 |


| Fee |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Health \& Wellness Fee | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Financial Aid Trust ${ }^{(2)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 |
| Recreation Fee | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Assoc. Students of AZ | 2 | 2 | 2 | $2$ | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total NonResident Undergraduate Online Tuition \& Fees ${ }^{(1)(3)}$ (4) (5) (6) (7) | \$497 | \$922 | \$1,347 | \$1,772 | \$2,197 | \$2,622 | \$3,066 | \$3,491 | \$3,916 | \$4,341 | \$4,766 | \$5,191 | \$5,616 | $\$ 6,041$ | \$6,466 | \|\$6,891 | \$7,316 | \$7,741 |

(1) Online tuition is billed per credit hour with no cap. To calculate the increase in tuition, add the tuition cost per hour for each additional hour taken to the tuition and fees total for eighteen hours.
(2) The Financial Aid Trust fee is $\$ 1$ less during Spring semester for enrollment in less than 7 hours.
(3) Special Class Fees are dependent on specific class enrollment and are not included here. Fees are available online through Class Search.
(4) Undergraduate students with total credit hours in excess of the threshold established by the Arizona Legislature are required to pay tuition on these excess hours. For resident students the excess hours tuition is $\$ 132$ per credit hour up to a maximum of $\$ 924$ for enrollment in 7 or more hours. For nonresident students the excess hours tuition is $\$ 182$ per credit hour up to a maximum of $\$ 2,184$ for enrollment in 12 or more credit hours. See students.asu.edu/tuitionandfees for additional information regarding the Undergraduate Excess Hours Tuition.
(5) If you have been admitted to the Barrett Honors College, an honors fee of $\$ 500$ for incoming freshmen and $\$ 450$ for continuing students will be assessed each fall and spring semester, in addition to tuition and fees presented above.
(6) All amounts shown in the Tuition and Fees Schedules or in other University publications or web pages represent tuition and fees as currently approved. However, Arizona State University reserves the right to increase or modify tuition and fees without prior notice, upon approval by the Arizona Board of Regents or as otherwise consistent with Board policy and to make such modifications applicable to students enrolled at ASU at that time as well as to incoming students. In addition, all tuition amounts and fees are subject to change at any time for correction of errors. Finally, please note that fee amounts billed for any period may be adjusted at a future date.
(7) Some graduate and undergraduate programs assess an additional program fee. These fees differ according to the college and or program.

## Post-Baccalaureate (Non-Degree Graduate)

| RESIDENT | ENROLLED HOURS |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 \& Over |
| Resident Graduate Tuition ${ }^{(1)}$ | $\$ 694$ | $\$ 1,388$ | $\$ 2,082$ | $\$ 2,776$ | $\$ 3,470$ | $\$ 4,164$ | $\$ 4,855$ |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 |


| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Graduate Resident Tuition \& Fees $^{(2)(3)(4)}$ | $\$ 847$ | $\$ 1,541$ | $\$ 2,235$ | $\$ 2,929$ | $\$ 3,623$ | $\$ 4,317$ | $\$ 5,111$ |


| NON-RESIDENT | ENROLLED HOURS |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | $\begin{aligned} & 12 \& \\ & \text { Over } \end{aligned}$ |
| Non-Resident Graduate Tuition | \$993 | \$1,986 | \$2,979 | \$3,972 | \$4,965 | \$5,958 | \$6,951 | \$7,944 | \$8,937 | \$9,930 | \$10,923 | \$11,917 |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 | 75 | 75 | 75 | 75 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 | 25 | 25 | 25 | 25 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 | 40 | 40 | 40 | 40 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 | 39 | 39 | 39 | 39 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 | 25 | 25 | 25 | 25 | 25 |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Graduate Non-Resident Tuition \& Fees ${ }^{(2) ~(3) ~(4)}$ | \$1,146 | \$2,139 | \$3,132 | \$4,125 | \$5,118 | \$6,111 | \$7,207 | \$8,200 | \$9,193 | \$10,186 | \$11,179 | \$12,173 |

${ }^{(1)}$ Resident tuition for enrollment in 7 hours or more is $\$ 1$ less during Spring semester. The Financial Aid Trust fee is $\$ 1$ less during Spring semester for enrollment less than 7 hours.
${ }^{(2)}$ Music Fees \& Special Class Fees are dependent on specific class enrollment and are not included here. Fees are available online through Class Search.
${ }^{(3)}$ All amounts shown in the Tuition and Fees Schedules or in other University publications or web pages represent tuition and fees as currently approved. However, Arizona State University reserves the right to increase or modify tuition and fees without prior notice, upon approval by the Arizona Board of Regents or as otherwise consistent with Board policy and to make such modifications applicable to students enrolled at ASU at that time as well as to incoming students. In addition, all tuition amounts and fees are subject to change at any time for correction of errors. Finally, please note that fee amounts billed for any period may be adjusted at a future date.
${ }^{(4)}$ Some graduate and undergraduate programs assess an additional program fee. These fees differ according to the college and or program.

## Graduate

| RESIDENT | ENROLLED HOURS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 \& Over |
| Resident Graduate Tuition ${ }^{(1)}$ | \$69 | \$1,38 | \$2,08 | \$2,77 | \$3,47 | \$4,16 | \$4,855 |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Graduate Resident Tuition \& Fees ${ }^{(2)(3)}$ | \$84 | \$1,54 | \$2,23 | \$2,92 | \$3,62 | \$4,31 | \$5,111 |


|  | 1 | 2 | 3 | 45 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | $\begin{aligned} & 12 \& \\ & \text { Over } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non-Resident Graduate Tuition | \$993 | \$1,986 | \$2,979 | \$3,972 | \$4,965 | \$5,958 | \$6,951 | \$7,944 | \$8,937 | \$9,930 | \$10,923 | \$11,917 |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 | 75 | 75 | 75 | 75 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 | 40 | 40 | 40 | 40 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 | 39 | 39 | 39 | 39 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 | 25 | 25 | 25 | 25 | 25 |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Graduate Non-Resident Tuition \& Fees ${ }^{(2)}{ }^{(3)}$ (4) | \$1,146 | \$2,139 | \$3,132 | \$4,125 | \$5,118 | \$6,111 | \$7,207 | \$8,200 | \$9,193 | \$10,186 | \$11,179 | \$12,173 |

${ }^{(1)}$ Resident tuition for enrollment in 7 hours or more is $\$ 1$ less during Spring semester.
${ }^{(2)}$ Music Fees \& Special Class Fees are dependent on specific class enrollment and are not included here. Fees are available online through Class Search.
${ }^{(3)}$ All amounts shown in the Tuition and Fees Schedules or in other University publications or web pages represent tuition and fees as currently approved. However, Arizona State University reserves the right to increase or modify tuition and fees without prior notice, upon approval by the Arizona Board of Regents or as otherwise consistent with Board policy and to make such modifications applicable to students enrolled at ASU at that time as well as to incoming students. In addition, all tuition amounts and fees are subject to change at any time for correction of errors. Finally, please note that fee amounts billed for any period may be adjusted at a future date.
${ }^{(4)}$ Some graduate and undergraduate programs assess an additional program fee. These fees differ according to the college and or program.

Graduate and Post-Baccalaureate Online

| RESIDENT | ENRO | LLED | HOURS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Resident Graduate Online Tuition | \$445 | \$890 | \$1,335 | \$1,780 | \$2,225 | \$2,670 | \$3,115 | \$3,560 | \$4,005 | \$4,450 | \$4,895 | \$5,340 | \$5,785 | \$6,230 | \$6,675 | \$7,120 | \$7,565 | \$8,010 |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student <br> Programs Fee | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Student Service Facility Fee | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Health \& Wellness Fee | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Financial Aid Trust ${ }^{(2)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 |
| Recreation Fee | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Assoc. <br> Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |  | 2 | 2 | 2 | 2 | 2 | 2 |
| Total <br> Graduate <br> Resident <br> Online <br>  <br> Fees ${ }^{(1)(3)}$ <br> (4)(5) (6) (7) | \$517 | \$962 | \$1,407 | \$1,852 | \$2,297 | \$2,742 | \$3,206 | \$3,651 | \$4,096 | \$4,541 | \$4,986 | \$5,431 | \$5,876 | \$6,321 | \$6,766 | \$7,211 | \$7,656 | \$8,101 |


| NON-RESIDENT | ENRO | OLLED | HOUR |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $1{ }^{1}$ | 23 | 3 | $4{ }^{4}$ | 5 | 6 | 78 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Non-Resident Graduate Online Tuition | \$445 | \$890 | \$1,335 | \$1,780 | \$2,225 | \$2,670 | \$3,115 | \$3,560\|\$ | \$4,005 | \$4,450\|\$ | \$4,895 | \$5,340 | \$5,785 | \$6,230\|\$ | \$6,675 | \$7,120 | \$7,565 | \$8,010 |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student <br> Programs Fee | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Student Service Facility Fee | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Health \& Wellness Fee | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Financial Aid Trust ${ }^{(2)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 |
| Recreation Fee | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Assoc. <br> Students of AZ | 2 | 2 | 2 | 2 |  |  | 2 | 2 |  | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Graduate Non-Resident Online Tuition \& Fees (4) (5) (6) (7) | \$517 | \$962 | \$1,407 | \$1,852 | \$2,297 | \$2,742 | $\$ 3,206$ | \$3,651 | $\$ 4,096$ | $\$ 4,541$ | \$4,986 | \$5,431 | \$5,876 | \$6,321 | \$6,766 | \$7,211\|\$ | \$7,656 | \$8,101 |

(1) Online tuition is billed per credit hour with no cap. To calculate the increase in tuition, add the tuition cost per hour for each additional hour taken to the tuition and fees total for twelve hours.
(2) The Financial Aid Trust fee is $\$ 1$ less during Spring semester for enrollment less than 7 hours.
(3) Special Class Fees are dependent on specific class enrollment and are not included here. Fees are available online through Class Search.
(4) All amounts shown in the Tuition and Fees Schedules or in other University publications or web pages represent tuition and fees as currently approved. However, Arizona State University reserves the right to increase or modify tuition and fees without prior notice, upon approval by the Arizona Board of Regents or as otherwise consistent with Board policy and to make such modifications applicable to students enrolled at ASU at that time as well as to incoming students. In addition, all tuition amounts and fees are subject to change at any time for correction of errors. Finally, please note that fee amounts billed for any period may be adjusted at a future date.
(5) Some graduate and undergraduate programs assess an additional program fee. These fees differ according to the college and or program.

New College of Interdisciplinary Arts and Sciences Freshman and Sophomore Undergraduate Degree Programs

| RESIDENT | ENROLLED HOURS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 \& Over |
| Resident Undergraduate Tuition | \$592 | \$1,184 | \$1,776 | \$2,368 | \$2,960 | \$3,552 | \$4,065 |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |



| RESIDENT | ENROLLED HOURS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 \& Over |
| Resident Undergraduate Tuition ${ }^{\text {(1) }}$ | \$592 | \$1,184 | \$1,776 | \$2,368 | \$2,960 | \$3,552 | \$4,144 |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Undergraduate Resident Tuition \& Fees ${ }^{(2)(3)(4)(5)(6)}$ | \$745 | \$1,337 | \$1,929 | \$2,521 | \$3,113 | \$3,705 | \$4,400 |


| NON- RESIDENT | ENROLLED HOURS |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2 | 3 | 4 |  | 6 |  | 8 | 9 | 10 | 11 | 12 \& Over |
| Non-Resident Undergraduate Tuition ${ }^{(1)}$ | \$818 | \$1,636 | \$2,454 | \$3,272 | \$4,090 | \$4,908 | \$5,726 | \$6,544 | \$7,362 | \$8,180 | \$8,998 | \$9,814 |
| Technology Fee |  | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 | 75 | 75 | 75 | 75 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 | 25 | 25 | 25 | 25 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 | 40 | 40 | 40 | 40 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 | 39 | 39 | 39 | 39 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 | 25 | 25 | 25 | 25 | 25 |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Undergraduate Non-Resident Tuition \& Fees ${ }^{(2)(3)(4)(5)(6)}$ |  | \$1,789 | \$2,607 | \$3,425 |  |  |  |  | \$7,618 |  | \$9,254 | \$10,070 |

[^2]${ }^{(3)}$ Undergraduate students with total credit hours in excess of the threshold established by the Arizona Legislature are required to pay tuition on these excess hours. For resident students the excess hours tuition is $\$ 132$ per credit hour up to a maximum of $\$ 924$ for enrollment in 7 or more hours. For nonresident students the excess hours tuition is $\$ 182$ per credit hour up to a maximum of $\$ 2,184$ for enrollment in 12 or more credit hours. See students.asu.edu/tuitionandfees for additional information regarding the Undergraduate Excess Hours Tuition.
${ }^{(4)}$ If you have been admitted to the Barrett Honors College, an honors fee of $\$ 500$ for incoming freshmen and $\$ 450$ for continuing students will be assessed each fall and spring semester, in addition to tuition and fees presented above
${ }^{(5)}$ All amounts shown in the Tuition and Fees Schedules or in other University publications or web pages represent tuition and fees as currently approved. However, Arizona State University reserves the right to increase or modify tuition and fees without prior notice, upon approval by the Arizona Board of Regents or as otherwise consistent with Board policy and to make such modifications applicable to students enrolled at ASU at that time as well as to incoming students. In addition, all tuition amounts and fees are subject to change at any time for correction of errors. Finally, please note that fee amounts billed for any period may be adjusted at a future date.
${ }^{(6)}$ Some graduate and undergraduate programs assess an additional program fee. These fees differ according to the college and or program.

College of Technology and Innovation Freshman and Sophomore Undergraduate Degree Programs

| RESIDENT | ENROLLED HOURS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 \& Over |
| Resident Undergraduate Tuition | \$592 | \$1,184 | \$1,776 | \$2,368 | \$2,960 | \$3,552 | \$4,065 |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Undergraduate Resident Tuition \& Fees ${ }^{(2)(3)(4)(5)(6)}$ | \$745 | \$1,337 | \$1,929 | \$2,521 | \$3,113 | \$3,705 | \$4,321 |


| RESIDENT | ENROLLED HOURS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 \& Over |
| Resident Undergraduate Tuition ${ }^{(1)}$ | \$592 | \$1,184 | \$1,776 | \$2,368 | \$2,960 | \$3,552 | \$4,144 |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Service Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 |


| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Total Undergraduate Resident Tuition \& Fees ${ }^{(2)(3)(4)(5)(6)}$ | $\$ 745$ | $\$ 1,337$ | $\$ 1,929$ | $\$ 2,521$ | $\$ 3,113$ | $\$ 3,705$ | $\$ 4,400$ |


| NON- RESIDENT | ENROLLED HOURS |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 \& Over |
| Non-Resident Undergraduate Tuition ${ }^{(1)}$ | \$818 | \$1,636 | \$2,454 | \$3,272 | \$4,090 | \$4,908 | \$5,726 | \$6,544 | \$7,362 | \$8,180 | \$8,998 | \$9,814 |
| Technology Fee | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Student Servic Facility Fee | 37 | 37 | 37 | 37 | 37 | 37 | 75 | 75 | 75 | 75 | 75 | 75 |
| Student Programs Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 | 25 | 25 | 25 | 25 | 25 |
| Health \& Wellness Fee | 20 | 20 | 20 | 20 | 20 | 20 | 40 | 40 | 40 | 40 | 40 | 40 |
| Financial Aid Trust ${ }^{(1)}$ | 20 | 20 | 20 | 20 | 20 | 20 | 39 | 39 | 39 | 39 | 39 | 39 |
| Recreation Fee | 12 | 12 | 12 | 12 | 12 | 12 | 25 | 25 | 25 | 25 | 25 | 25 |
| Assoc. Students of AZ | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Undergraduate Non-Resident Tuition \& Fees ${ }^{(2)(3)(4)(5)(6)}$ | \$971 | \$1,789 | \$2,607 | \$3,425 | \$4,243 | \$5,061 | \$5,982 | \$6,800 | \$7,618 | \$8,436 | \$9,254 | \$10,070 |

*The ASU Tuition Commitment is that full-time undergraduate resident tuition will increase at a reasonable rate from the semester of admission or readmission. For more information about the Tuition Commitment and the Commitment Period please refer tostudents.asu.edu/tuitionandfees
${ }^{(1)}$ Resident tuition for enrollment in 7 hours or more is a \$1 less during Spring semester. The Financial Aid Trust fee is $\$ 1$ less during Spring semester for enrollment in less than 7 hours.
${ }^{(2)}$ Music Fees \& Special Class Fees are dependent on specific class enrollment and are not included here. Fees are available online through Class Search.
${ }^{(3)}$ Undergraduate students with total credit hours in excess of the threshold established by the Arizona Legislature are required to pay tuition on these excess hours. For resident students the excess hours tuition is $\$ 132$ per credit hour up to a maximum of $\$ 924$ for enrollment in 7 or more hours. For nonresident students the excess hours tuition is $\$ 182$ per credit hour up to a maximum of $\$ 2,184$ for enrollment in 12 or more credit hours. See students.asu.edu/tuitionandfees for additional information regarding the Undergraduate Excess Hours Tuition.
${ }^{(4)}$ If you have been admitted to the Barrett Honors College, an honors fee of $\$ 500$ for incoming freshmen and $\$ 450$ for continuing students will be assessed each fall and spring semester, in addition to tuition and fees presented above
${ }^{(5)}$ All amounts shown in the Tuition and Fees Schedules or in other University publications or web pages represent tuition and fees as currently approved. However, Arizona State University reserves the right to increase or modify tuition and fees without prior notice, upon approval by the Arizona Board of Regents or as otherwise consistent with Board policy and to make such modifications applicable to students enrolled at ASU at that time as well as to incoming students. In addition, all tuition amounts and fees are subject to change at any time for correction of errors. Finally, please note that fee amounts billed for any period may be adjusted at a future date.
${ }^{(6)}$ Some graduate and undergraduate programs assess an additional program fee. These fees differ according to the college and or program.
Source URL: http://catalog.asu.edu/tuitionandfees/fees fall2011.html

## University Policies

## Undergraduate Policies and Procedures

## Freshman Admission Requirements and Timelines

A freshman is a student who is applying to ASU while enrolled in high school or a student who has not attended college since high school graduation.

## Admission Requirements

ASU welcomes applications from students with diverse academic backgrounds and interests. Freshman applicants who possess a high school diploma and meet the following requirements will be admitted to ASU.
Applicants must successfully complete ASU competency requirement. Admission may be granted with one deficiency in no more than two competency areas. Deficiencies cannot be in both math and laboratory science. Students must earn a minimum 2.0 in any subject area. Most competencies may also be met by test scores or college courses. See Detailed Competency Requirements [2] for more information.

- English - 4 years (composition/literature based)
- Math - 4 years - Algebra I, Geometry, Algebra II and one course requiring Algebra II as a prerequisite.
- Laboratory Science - 3 years total (1 year each from any of the following areas are accepted: Biology, Chemistry, Earth Science, Integrated Sciences, and Physics)
- Social Science - 2 years (including one year American History)
- Foreign Language - 2 years (same language)
- Fine Arts - 1 year

Applicants must also meet at least one of the following:

- Top $25 \%$ in high school graduating class
- 3.0 GPA in competency courses ( $4.0=\mathrm{A}$ )
- ACT 22 (24 nonresidents)*
- SAT Reasoning 1040 (1110 nonresidents)*
*ASU does not require the writing portion of these tests.


## Individual Review

All students who don't meet the above standards will be evaluated through a process called Individual Review. Through this process Undergraduate Admissions will review all available information about a student's application, carefully considering all aspects of a student's academic background and accomplishments. Submission of an ACT or SAT test score is highly recommended. In some cases, additional information might be requested.
Higher Requirements for Some ASU Schools/Colleges
Some colleges/schools have higher requirements for admission to their majors. To learn more about requirements, find the major of your interest at Degree Search [3]. You should select a second major on your application if your first choice has higher requirements.

## Home School Applicants

Home schooled students must meet all of the above requirements in addition to the following requirements:

- Competency Requirement - Per Arizona Board of Regents (ABOR) policy, laboratory sciences must be conducted in real labs and students should complete the Evaluation of Laboratory Science Courses [4] form as part of the application process. (If you have questions about the laboratory sciences requirement, please call 480-965-7788.)
- Aptitude Requirement - Must be met with SAT or ACT test score.
- Graduation Requirement - Upon completion of secondary school education, complete the Affidavit of Completion of Secondary School Education [4]. The affidavit must be completed by the parent/guardian and notarized.
For questions regarding admission for Home Schooled students, e-mail asuhomeschool@asu.edu [5].
General Educational Development (GED)
Students may also meet admission requirements by submitting an official GED score of 500 or above.


## Application Dates

ASU's preferential application dates follows. Note that after this date, some ASU colleges and schools may limit admission to their program. Submit your application and all of your application materials by the timelines listed below to ensure you receive full consideration for admission.
Summer and Fall

- February 1 for automatic consideration for ASU's merit-based scholarships
- May 1

Application Steps

- Complete the Undergraduate Admission Application. ASU prefers that you apply online [6].
- Submit the nonrefundable application fee
- Arizona residents - \$50.
- Non-residents - \$65.

1. Have your ACT or SAT scores sent directly to ASU. ACT or SAT scores are required for merit scholarship consideration and for ASU course placement.
2. Applicants must request transcripts from each educational institution attended. Official transcripts must be mailed or sent electronically directly to Undergraduate Admissions by the records office of the issuing institution(s). ASU does not accept transcripts sent or carried by hand by applicants themselves or transmitted by fax. High school transcripts must show GPA and date of graduation. ASU requires an English translation of all foreign-language transcripts.
ASU will review your application file once you have submitted all materials. To see if you have any missing items, and to view your admission status, sign in at My ASU [7] using your ASURITE ID, which is sent to you after you apply for admission.
Mailing Address (All materials, all campuses)
Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112
Undergraduate Admissions Contact Information and Office Locations [8]
Source URL: http://students.asu.edu/freshman/requirements
Links: [1] http://students.asu.edu/taxonomy/term/160
[2] http://students.asu.edu/node/18
[3] http://www.asu.edu/degreesearch
[4] http://students.asu.edu/node/1072
[5] mailto:asuhomeschool@asu.edu
[6] http://www.asu.edu/ugapp
[7] https://my.asu.edu/
[8] http://students.asu.edu/contact/admissions

## Contact Undergraduate Admissions

Undergraduate Admissions delivers services and resources to assist students in the admission and transition to ASU. Services include high school relations, community college relations, international student relations, scholar recruitment, application processing and new student orientation.
Request Materials

- Freshman Inquiries [2]
- Transfer Inquiries [3]
- International Undergraduate Inquiries [4]


## High School Representatives

- Arizona [5] High School Representatives
- National [6] Representatives by state

Undergraduate Admissions' Mailing Address
Have your test scores (such as ACT, SAT and TOEFL) and official high school and college transcripts sent from the issuing institution to the address below. Any written inquiries should be sent to this address as well.
Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112
Office Locations
Downtown Phoenix campus
Downtown Phoenix campus

Phone: 480-965-7788
Fax: 480-965-3610
Location:
University Center Building, Suite 130 [7]
Mailing Address:
Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112
Monday - Friday 8:00 a.m. - 5:00 p.m.

## Polytechnic campus

Polytechnic campus
Phone: 480-965-7788
Fax: 480-965-3610
Location:
Building \#380 [9]
Mailing Address:
Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112
Monday - Friday 8:00 a.m. - 5:00 p.m.

Phone: 480-965-7788
Fax: 480-965-3610

## Location:

Student Services Building, Room 110 [8]

## Mailing Address:

Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112
Monday: 8:00 a.m. - 4:00 p.m.
Tuesday - Friday: 8:00 a.m. - 5:00 p.m.

## West campus

West campus
Phone: 480-965-7788
Fax: 480-965-3610
Location:
University Center, Room 120 [10]
Mailing Address:
Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112
Monday - Friday: 8:00 a.m. - 5:00 p.m.

Source URL: http://students.asu.edu/contact/admissions
Links:[1] http://students.asu.edu/taxonomy/term/160
[2] https://webapp4.asu.edu/formmanager/FormUserController?form_id=12\&STUTYPE=1
[3] https://webapp4.asu.edu/formmanager/FormUserController?form_id=9\&STUTYPE=6
[4] http://www.asu.edu/admissions/contactadmissions/internationalform.htm
[5] http://students.asu.edu/node/228
[6] http://students.asu.edu/node/142
[7] http://www.asu.edu/map/interactive/?campus=downtown\&building=UCENT
[8] http://www.asu.edu/map/interactive/?campus=tempe\&building=SSV
[9] http://www.asu.edu/map/interactive/?campus=polytechnic\&building=QUAD1
[10] http://www.asu.edu/map/interactive/?campus=west\&building=UCB

## Steps for Freshman Enrollment

## Fall and Summer 2011

## Apply for Admission

## Complete an application for admission. [2]

Complete your application file (application fee, transcripts and scores)
7. If you did not submit your application fee with your admission application, you can pay on My ASU [3]. You can also mail a check or money order to ASU or call Undergraduate Admissions (480-965-7788, option 5) and pay with a debit or credit card (Visa/Mastercard).
8. Ask each high school and college you have attended to send your official transcripts directly to ASU. Hand-delivered transcripts are not official.
9. If your ACT or SAT score does not appear on your high school transcript, ask ACT www.act.org [4] or the College Board (SAT) www.collegeboard.com [5] to send your scores directly to ASU.
10. If you are concurrently enrolled in high school and college courses, or if you are dually enrolled in college courses taught on your high school campus, you must request official transcripts from both your high school and the college offering the dual credit to be sent to ASU. ASU will not award college credit that appears only on high school transcripts.
11. Upon graduation from high school or completion of your current college semester, request that a final transcript be sent
from your school to ASU. Your final high school transcript must show your date of graduation.
Undergraduate Admissions' Mailing Address:
Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112
Activate Accounts [6]After you have applied for admission, you will be issued an ASURITE ID, which will give you access to online student services, including those at My ASU [3], such as the ability to check your admission status. While you activate your ASURITE ID, be sure to set up your asu.edu email address so you can receive important messages from ASU.

## After Admission

## Pay Your Enrollment Deposit

Upon admission, first-time freshmen pay an enrollment deposit [7]. The deposit may be paid on My ASU [3]. Apply for Financial Aid and Scholarships [8] ASU encourages all students to complete the Free Application for Federal Student Aid (FAFSA [9]). The FAFSA becomes available in January. ASU's priority date for submission is March 1. Students do not need to be admitted to ASU to submit a FAFSA and begin the process; however, only admitted students are awarded aid. Search and apply for scholarships that may fit your profile, talents and academic interests.
Note that Arizona law requires verification of citizenship or other lawful presence [10] in the United States for all students who are receiving in-state tuition and/or financial aid funded by state money.

## Next Steps for Admitted Freshmen After Deposit

Confirm Housing and Dining [11] All freshmen are expected to live on the campus where their academic major is located. Students who live on campus for at least their first year have higher GPAs and a more successful transition from high school to college. Once you have paid your deposit, you can confirm your housing preferences online at My ASU [3]. (Allow 24 hours for your deposit to post.) If you are living at home with your parents or have other special circumstances that prevent you from living on campus, you must notify the university by requesting an on-campus housing exemption. Orientation and Registration [12] Once you have paid your enrollment deposit, you can sign up for Orientation. During orientation, you will be able to meet with your academic advisor, determine courses and register for classes. You will also be able to get your Sun Card, learn more about financial aid and other university resources, and meet other new students. You must have submitted an ACT or SAT score to ASU and also have completed the math placement exam [13] before you will be able to register for classes at orientation. The university uses this information to guide you to the appropriate freshman English composition course and freshman math course. You will receive further information and instructions with your orientation reservation materials. In the meantime, to see if ASU has your scores on file, click on "Test Scores" in the "My Admission and Orientation" box on My ASU [14]. If you have taken AP, IB, and/or CLEP exams, request that your scores be sent directly to ASU.
Submit Immunization Verification [15] Your MMR verification must be submitted to ASU before Orientation so you can register for classes. Explore Summer School Options [16] Get a jump start on your ASU experience by enrolling in summer sessions. Admission to ASU for the fall semester allows you to register for summer classes without submitting another application. Plan to attend an early orientation program to consult with your advisor on both fall and summer class selection. ASU's summer course listing is available in February.
Parking Decals and Commuter Options [17] Students may purchase parking decals online. (Students living in the residence halls will receive information with their hall assignments.) ASU also offers a variety of commuter options including discounted public bus and light rail passes, and free shuttles between ASU campuses.
Tuition and Fees [18] Tuition is based on your residency for tuition purposes status. Note that Arizona law requires verification of citizenship or other lawful presence [10] in the United States for all students who are receiving in-state tuition and/or financial aid funded by state money.
Tuition charges will be billed to your student account and may be viewed online through My ASU after registration. By registering for classes you agree to pay all applicable tuition and registration fees. If you decide not to attend, you must completely withdraw from all classes before the semester begins. If tuition is not paid by the applicable due date, or financial aid is not awarded and accepted by the due date, you will automatically be enrolled in the tuition installment plan and charged a nonrefundable enrollment fee.
Access online billing at My ASU [3] (click Finances then Pay). Students are responsible for reviewing their ASU e-mail account for notification of billing statements and to review their student account on My ASU for current information. Billing statements are not mailed. Attend Fall Welcome [19]
Source URL: http://students.asu.edu/admission/steps
Links:[1] http://students.asu.edu/taxonomy/term/160
[2] http://asu.edu/ugapp
[3] https://my.asu.edu
[4] http://www.act.org/
[5] http://www.collegeboard.com/
[6] http://www.asu.edu/asurite
[7] http://students.asu.edu/node/8310
[8] http://students.asu.edu/financialaid
[9] http://students.asu.edu/glossary/term/12
[10] http://students.asu.edu/node/1291
[11] http://www.asu.edu/housing
[12] http://students.asu.edu/orientation
[13] http://students.asu.edu/math
[14] http://my.asu.edu/
[15] http://students.asu.edu/node/1545
[16] http://students.asu.edu/summer/newstudents
[17] http://uabf.asu.edu/parking_transportation
[18] http://students.asu.edu/costs
[19] http://students.asu.edu/fallwelcome
Transfer requirements
Transfer applicants must meet at least one of the following requirements for admission to ASU:

- Be a high school graduate who has attended a college/university since high school graduation.
- Complete an Arizona General Education Curriculum (AGEC) at an accredited Arizona community college.
- Complete an associate degree or higher.

Assured Admission*

## Arizona Residents

Arizona transfer students are assured admission to ASU if they meet one of the following requirements:
12. Completion of an associate's degree with a 2.0 or higher GPA (4.0=A).
13. AGEC (Arizona General Education Curriculum) with a 2.5 GPA or higher ( $4.0=\mathrm{A}$ ).
14. Complete a transfer pathway (MAPP, TAG, RN-BSN Pathway, etc.) through an accredited Arizona community college.

## Nonresidents

Nonresident transfer students are admitted to ASU if they meet one of the following requirements:

- Completion of an associate's degree with a 2.5 or higher A (4.0=A).
- AGEC with a 2.5 GPA or higher (4.0=A). (For those students transferring from a California community college [1], we accept the IGETC/CSU GE.)
*Some colleges/schools have higher requirements for admission to their majors. See asu.edu/degrees for details.
Individual Review for Admission
Transferring with 24 transferable credits or more:
If a student has more than 24 transferable credit hours, Arizona residents with above a 2.0 cumulative GPA in transfer hours will be considered for admission ( 2.5 cumulative GPA for nonresidents). Through this individual review process, the Office of Undergraduate Admissions will review all available information about a student's application, carefully considering all aspects of a student's academic background and accomplishments. Submission of an ACT or SAT test score is highly recommended. In some cases, additional information might be requested.
Transferring with fewer than 24 transferable credits:
If a student has fewer than 24 transferable hours, Arizona residents must have a 2.0 cumulative GPA in all transfer hours ( 2.5 cumulative GPA for nonresidents) and must also meet freshman admission requirements [2].


## Admission for International Transfer Students

Please visit the International Admission site [3] for details for international transfer students.
Home School Students
Transfer students who graduated high school in a home school setting and have not completed an associate degree or higher (or the Arizona General Education Curriculum) must submit the Affidavit of Completion of Secondary School Education [4]. The affidavit must be completed by parent/guardian and notarized.
Home schooled students may also meet admission requirements by submitting an official GED score of 500 or above. For questions regarding admission for home schooled students, e-mail asuhomeschool@asu.edu [5].
School/College Requirements
Some programs have additional requirements. Please check with your desired program of study for specific details. See degree search [6] for major-specific admission information.

Source URL: http://transfer.asu.edu/transferrequirements
Published on Transfer Site (http://transfer.asu.edu)
Links:[1] http://transfer.asu.edu/communitycollege/CA/general
[2] http://students.asu.edu/freshman/requirements
[3] http://global.asu.edu/future/undergrad
[4] http://students.asu.edu/files/Home School Affidavit_0.pdf
[5] mailto:asuhomeschool@asu.edu
[6] http://asu.edu/programs/

## International Undergraduate Admission

Your future will be shaped by decisions you make about education now. At ASU, you'll study with Fulbright scholars, Nobel laureates and other outstanding faculty. And with more than $\mathbf{2 5 0}$ undergraduate programs to explore, you'll find a program that matches your interests and talents.

## Scholarship for International Students

ASU offers a limited number of New American University Scholarships for highly qualified freshman students (F-1 and J-1 visa status) who are non-immigrant, nonresident and degree seeking. In order to be considered for this competitive scholarship, all admission application documents must be on file with ASU by April 1, 2011 for the fall 2011 semester. There is no separate scholarship application to complete. For information concerning scholarships deadline and requirements, please visit the scholarship posting or e-mail asuinternational@asu.edu.

## Admission Requirements

An international student (F-1 and J-1 visas) is a student who is not a citizen of, or a permanent resident of, or a refugee in the United States of America.

## Academic Requirement

- Freshmen must have a 3.00 grade point average (GPA) (a "B" or better where "A"=4.00) from a secondary school.
- Transfer students must have a minimum 2.50 GPA (a "C+" or better where "A"=4.00) from a college or university.
- Some ASU colleges/schools require a minimum ACT or SAT score for admission into their programs, including the W. P. Carey School of Business.


## English Language Proficiency Requirement

Applicants whose native language is not English (identified by the U.S. Department of State Bureau of Public Affairs) must provide evidence of English language proficiency. The English proficiency requirement may be fulfilled by meeting one of the following:
15. Minimum score of 500 (paper-based), 173 (computer-based), or 61 (internet-based) on the Test of English as a Foreign Language (TOEFL).
16. Minimum overall band of 6.0 with no band below 5.5 on the International English Language Testing System (IELTS).
17. Minimum Pearson Test of English (PTE) of 53.

Note: Some ASU colleges/schools have higher English proficiency requirements. For example, The ASU Ira A. Fulton Schools of Engineering require a higher TOEFL score of 550 (paper-based), 213 (computer-based) or 79 (internet-based) as well as an IELTS score of 6.5. And, the Walter Cronkite School of Journalism requires a higher TOEFL score of 600 (paper-based) or 100 (internet-based), an IELTS score of 7.0 and a PTE score of 73.
Exceptions to the English (TOEFL/IELTS) Requirement:

- Applicants who have completed their junior and senior years in a U.S. high school with SAT Verbal score of 550 or ACT English score of 23.
- Applicants who have completed a minimum of 48 transferable semester credits including six credits of freshman English composition at a U.S. college or university with a cumulative GPA of 2.50 or higher.
- Applicants holding a bachelor's degree from a regionally accredited U.S. college or university.
- Applicants who have completed four years of high school in a U.S. high school. These applicants are subject to high school competency requirements.
- The TOEFL is not required for admission for applicants who have successfully completed the Advanced 2 level of the American English and Culture Program (AECP) at Arizona State University.


## Conditional Admission

ASU may offer conditional undergraduate admission to international applicants who meet the academic (aptitude) requirement but whose TOEFL and IELTS does not meet the minimum English language proficiency requirement. Through conditional admission, students must first successfully complete the appropriate level English language course at ASU's American English and Culture Program (AECP) before being allowed to enroll in university courses.

Conditional Admission Test Scores: Minimum test scores are required to be eligible for conditional admission for international undergraduate applicants who are academically qualified to be admitted to ASU, but do not meet the English language requirement:
TOEFL

| TOEFL - Paper | $430-497$ |
| :--- | :--- |
| TOEFL - Computer | $133-170$ |
| TOEFL - iBT | $47-60$ |
| IELTS | $4.5-5.9$ |
| PTE | $34-52$ |

For more information, contact asuinternational@asu.edu
Competency Requirement
International students who attended four years of high school in the U.S. are required to meet the competency requirements.

- English: four years (composition/literature based).
- Math: four years - algebra I, geometry, algebra II and one course requiring algebra II as a prerequisite.
- Laboratory Science: three years total (1 year each from any of the following areas are accepted: biology, chemistry, earth science, integrated sciences, and physics).
- Social Science: two years (including one year American history).
- Foreign Language: two years (same language).
- Fine Arts: one year.

Higher Requirements for Some ASU Schools/Colleges
Some ASU colleges/schools have higher standards for admission into their programs. International applicants must meet general university international admission requirements as well as the appropriate freshman or transfer college/school requirements of their major. See Degree Search for details.
Financial Guarantee
All international applicants on F-1 or J-1 visas must provide a Financial Guarantee to show evidence of sufficient funds available for their studies before the application can be processed.

## Application Deadlines

You must submit the Application for Undergraduate Admission, along with the application fee, by the deadline specified for each semester. In order to expedite the evaluation of your application, also submit official transcripts, test scores and supporting credentials immediately.

## Fall Semester 2011

Application deadline is May 1, 2011.
Submit a complete application file by Apr. 1, 2011 to be considered for an ASU merit-based scholarship upon admission.
International students who have been admitted for the fall semester may begin attending classes as early as summer session.

## Summer Sessions 2011

Application deadline is Feb. 1, 2011.
Applications for summer admission which arrive after Feb. 1, 2011, will be reviewed for admission for fall 2011.
International students who are in the U.S. and who are admitted for fall 2011 as full-time, degree-seeking undergraduates will also be eligible to enroll for summer 2011. Apply as early as possible to allow time for all documentation and processes to be completed.
Spring Semester 2012
Application deadline is Oct. 1, 2011.

## Application Procedures

1. Complete the Undergraduate Admission Application. ASU prefers students to apply online.

If you are unable to complete the online application, download the paper application. Complete and sign the application (incomplete, unsigned applications cannot be processed). Send the completed application and all supporting documents (application fee, transcripts, test scores and the financial guarantee) to the address listed below.

## Mailing Address

Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112
USA
For more information, call: 480-965-7788.
2. Submit the nonrefundable application fee. The application fee is $\$ 65$ (USD). If you did not submit your application fee with your admission application, you may pay in My ASU or submit payment in the form of a check or money order drawn on a U.S. Banking Affiliate and made payable to Arizona State University. Do not send cash or international postal money orders. Application fees cannot be waived or transferred to a future application.
3. Request that an official transcript be sent directly from your school(s) to Undergraduate Admissions. Upon graduation or completion of the semester, request that a final transcript be sent directly to ASU to determine final admission status.
Official Transcripts: Official transcripts are certified copies of official documents from each secondary school, college, university and/or technical schools attended.
Records must include courses completed, grades or marks earned, and certificates or degrees awarded. Include a certified English translation of all documents not written in English. Official documents include:

- Original academic credentials issued by the registrar of the institution attended, bearing the original raised or colored seal of the institution and the signature of the institution's registrar, academic official or recognized international organization.
- Photocopies of academic credentials that have been verified as true copies of the original by a responsible official of the institution attended or by an educational representative of the country's government or embassy. Each page must bear the verifying official's signature and stamp.
- Photocopies of international academic credentials on file with the registrar of an institution you previously attended in the U.S.
- Photocopies of academic credentials that have been certified by a recognized international educational organization -- such as the U.S. Educational Foundation, AMIDEAST or the Institute for International Education.
Note: Photocopies certified by a notary public are not official. Scanned copies are also not accepted in lieu of original official academic documents.


## 4. Submit evidence of English language proficiency.

Have your TOEFL or IELTS score sent directly to ASU.
TOEFL: The official TOEFL (Test of English as a Foreign Language) score report can be sent directly to ASU from the Educational Testing Service. ASU's TOEFL institutional code is 4007 . For information about this test and registration procedures, contact ETS at PO Box 6151 Princeton, NJ 08541-6151, USA or visit www.toefl.org.
IELTS: For information about this test and registration procedures, contact the IELTS Office, University of Cambridge Local Examination Syndicate, 1 Hills Road, Cambridge/CB1 2EU, UK or visit www.ielts.org.
PTE: For information about the Pearson Test of English, visit http://www.pearsonpte.com/Pages/home.aspx.
5. Submit your ACT or SAT scores. If you have taken the ACT or SAT, please submit official scores to Undergraduate Admissions, because some ASU colleges/schools have minimum ACT/SAT score requirements for entrance to their programs.
6. Submit your financial guarantee. In compliance with Bureau of Citizenship and Immigration Services regulations, all international applicants on the F-1 (student) or J-1 (exchange) visa must provide evidence of sufficient funds available for their studies. The Financial Guarantee, dated within the past six months, must be co-signed by an authorized bank or representative of a recognized sponsoring agency in the U.S.A. An Affidavit of Support cannot be used in lieu of a bank statement. ASU has a Financial Guarantee Form (.PDF). ASU requires a bank statement or a bank letterhead that has been cosigned by a banking official.

## Deferred Enrollment

You may not defer enrollment at ASU. If you must change the semester of enrollment on your application, please submit another online application and pay a new application fee for the new semester in which you are applying. Please note that all of your supporting documents are on file at ASU for one year, so you may not need to submit your other documents again.

## After You Have Been Admitted to ASU

Next steps for fall 2011 (http://global.asu.edu/prearrival).
Next steps for spring 2011 (http://global.asu.edu/prearrival/spring).

## Items to Consider

Admission to ASU cannot be determined until your file is complete and all of your credentials are evaluated. You must enroll fulltime each semester. Students holding F-2 visas cannot attend ASU on a full-time basis.
Source URL: http://global.asu.edu/future/undergrad
Nondegree Student Admission
Some individuals may be interested in studying in a nondegree status, either through pre-college summer programs or for their own personal learning experience. If this matches your interest, please read more about the nondegree status and follow the steps to completing a nondegree application for admission.

## Definition of Nondegree Student Status

A nondegree student is one who has not attended ASU as a degree-seeking student, who has not earned a bachelor's degree, who is not attending full time, and who is not, at this time, applying to a degree program.
Once admitted to a degree program, a student is not permitted to register in a nondegree status.

Nondegree students may enroll in eight credit hours each fall or spring semester, seven semester hours for each 5-week summer session and nine semester hours for the 8 -week summer session.
Nondegree students may apply up to 15 hours taken in nondegree status to a degree program if you choose to pursue an undergraduate degree in the future.
Nondegree students are not eligible for financial aid.
Nondegree students may not be eligible for academic advising.
Application Requirements
Application Deadlines
Application Procedures

## Requirements

To be admitted to ASU as a nondegree student, an applicant must be a high school graduate.
Students currently enrolled in high school and persons under the age of 18 may be admitted as nondegree students by submitting an official ACT composite score of 22 or SAT Reasoning score of 1040. ASU does not require the writing option for these tests.
Apply now. [3]

## Preferential Application Deadlines

You must submit the Application for Undergraduate Admission, along with the application fee, by the deadline specified for each semester. In order to expedite the evaluation of your application, also submit official transcripts, test scores and supporting credentials immediately.
Fall semester: May 1
Spring semester: December 1
Summer session: May 1
Nondegree applications received after the preferential date for each semester will be considered on a space-available basis. Space is limited in some programs and admission to these programs is more competitive.
[4]

## Application Procedures

- Complete the Undergraduate Admission Application. ASU prefers that you apply online [3].
- Submit the nonrefundable application fee:
o Arizona residents - \$50.
o Non-residents and online - $\$ 65$.
- If needed, have your ACT or SAT scores sent directly to ASU.

ASU will review your application for admission once all materials are on file. To see if your file is complete, sign in to My ASU [5] using your ASURITE ID provided to you after you submitted your application.
Mailing Address (All materials, all campuses)
Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112
Undergraduate Admissions Contact Information and Office Locations [6]

Source URL: http://students.asu.edu/admission/nondegree
Links:[1] http://students.asu.edu/taxonomy/term/58
[2] http://students.asu.edu/taxonomy/term/66
[3] http://www.asu.edu/ugapp
[4] https://sec.was.asu.edu/ugapp/mainmenulogic?selection=1
[5] https://my.asu.edu
[6] http://students.asu.edu/node/767

## Undergraduate Readmission

## Quick Re-entry

If you are an undergraduate degree seeking student who previously attended ASU but have not been enrolled at ASU for one or two consecutive fall or spring semesters you are eligible to return through "Quick Re-entry." You do not need to submit a new application or application fee. You may sign in to My ASU [3] and register for classes. Note that you may have hold or to do items that you need to complete before you are able to register for classes. F1/J1 students are still responsible for all SEVIS requirements and should check with the International Students and Scholars Office [4] at ASU.

NOTE: you must submit official transcript(s) from any institution(s) you attended during your absence from ASU. Official transcripts must be mailed or sent electronically directly to Undergraduate Admissions by the records office of the issuing institution(s). ASU does not accept transcripts sent or carried by hand by applicants themselves or transmitted by fax. See Mailing Address.

## Readmission Requirements

If you are not eligible for "Quick Re-entry" (i.e., because you have not been enrolled at ASU for three or more semesters, completed your academic program or were academically disqualified), you must apply for readmission [5] and submit applicable fees. An applicant for readmission must have an ASU GPA of 2.0 or higher, depending on the ASU school or college. Students who do not meet this GPA requirement may appeal. In these cases, the completed application for readmission may be subject to a due date that is earlier than the application deadline.
NOTE: you must submit official transcript(s) from any institution(s) you attended during your absence from ASU. Official transcripts must be mailed directly to Undergraduate Admissions by the records office of the issuing institution(s). ASU does not accept transcripts sent or carried by hand by applicants themselves or transmitted by fax. See Mailing Address. Read more about transferring college credit to ASU [6].

## Preferential Application Deadlines

Fall Semester ASU's preferential readmission application deadline for Fall Semester is June 1. Readmission applications received after June 1 will be considered on a space-available basis. Space is limited in some programs and admission to these programs is more competitive.
Spring Semester ASU's preferential readmission application deadline for Spring Semester is December 1. Readmission applications received after December 1 will be considered on a space-available basis. Space is limited in some programs and admission to these programs is more competitive.
Summer Semester Preferential deadline is May 1.
What needs to be submitted by the deadline? You must submit the Application for Undergraduate Admission, along with the application fee, by the deadline specified for each semester. In order to expedite the evaluation of your application, also submit official transcripts, test scores and supporting credentials immediately.
I was previously admitted to ASU but did not attend. Am I a readmission student or a transfer student? If you have previously been admitted to ASU but did not attend, you will be considered a freshman student [7] or a transfer student [8].
Application Procedures

1. Complete the Undergraduate Admission Application [5]. ASU prefers that you apply online.
2. Submit the nonrefundable application fee:

- Arizona Residents - \$50.
- Non-residents - \$65.

If applying to an Online degree program a nonrefundable application fee of $\$ 65$ will be charged regardless of residency classification.
3. Request that an official transcript be sent directly from your school(s) to Undergraduate Admissions. Upon completion of the semester, request that a final transcript be sent directly to ASU to determine final admission status. A student who does not meet readmission requirements for his/her selected major must submit complete transcripts before an admissions decision is made. Students need only submit transcripts from institutions other than ASU. NOTE: Receipt of your final transcript impacts financial aid disbursement and eligibility to register for future classes.
4. All applicants on F1 or J1 visas must provide a Financial Guarantee to show evidence of sufficient funds available for their studies before the application can be processed. In addition, US Citizenship and Immigration Services (USCIS) requires ASU to obtain additional information prior to processing your visa application. You must go to My ASU [3] and login, and then update address information showing Local and SEVIS addresses (list current US address as Local Address; add home country address as SEVIS Address). Please note that if you are readmitted, you must still meet all deadlines associated with the issuance of an I-20 to attend ASU. These deadlines are dependent upon your current location. Contact the International Student Office at ASU for immigration information at 480.965.7451 or ISO@asu.edu [9].
Mailing Address (Transcripts and other materials, all campuses)
Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112

## Admission Before Receipt of Final Transcript

Applicants enrolled in other colleges and universities may be considered for readmission on the basis of meeting all readmission requirements, except for a final transcript of work in progress. This final transcript must be sent to Undergraduate Admissions directly from the issuing institution immediately after the work in progress has been completed. Transcripts carried by hand are not

## accepted.

Admission is official only after the final transcript has been received showing that the applicant has met the university readmission requirements. In the event the applicant does not qualify or has falsified application documents, readmission and registration are canceled, and any registration fees paid are returned according to university refund policies.

## Veterans Exception

By Arizona statute, no failing grades received by a veteran at an Arizona university or community college before military service may be considered when determining admissibility. This exception applies only to veterans who

- are honorably discharged;
- have served in the armed forces of the United States for a minimum of two years; and
- have previously enrolled at a university or community college in Arizona.

Military service records must be submitted, including form DD 214.

## Academic Renewal

Academic renewal is a university policy administered to recalculate the cumulative ASU GPA of an undergraduate student who:

1. Is pursuing his/her first undergraduate degree and has not previously received an academic renewal; and 2. Has a cumulative ASU GPA below 2.0 (individual colleges may elect to consider applications for students whose GPA is a 2.0 or higher); and 3. Is readmitted to a degree program after an absence of at least five continuous calendar years (including summer sessions).
Courses (including transfer credits) completed before the five-year absence with a grade " $C$ " (2.00) or higher was earned are treated in the same manner as if all the credits were transfer credits, up to a maximum of 60 credit hours.
The cumulative GPA is based only on credits earned subsequent to the student's reentry. Graduation requirements for resident credit hours and GPA must be fulfilled after the academic renewal. Graduation requirements for academic recognition (resident credit hours and GPA) must also be fulfilled after the academic renewal.
Courses completed before and after the academic renewal remain on the transcript and may be considered when students apply for undergraduate professional or graduate programs.
A request for academic renewal follows this procedure:

- Students interested in academic renewal must fill out the Application for Academic Renewal and submit the form to the Dean's Office in the college of your major.
- The Application for Academic Renewal may be submitted immediately upon readmission but must be submitted no later than the start of the third semester after readmission.
- The Dean's Office specifies in advance a minimum of 12 semester hours required for completion.
- When the approved credits are completed with a cumulative GPA of 2.50 or higher, and no grade lower than " C " (2.00) in each course, the Dean's Office will forward the Application for Academic Renewal to the University Registrar's Office for processing.

Only readmission students working toward their first undergraduate degree are eligible to apply for academic renewal, which may be effected only once during a student's academic career.
Academic renewal is transferable among colleges.
All students with a cumulative ASU GPA below 2.00 and have been absent from ASU 5 consecutive calendar years or more are eligible to petition for academic renewal. Individual colleges may elect to entertain petitions for academic renewal from students with ASU GPAs above 2.00. College standards committees have final authorization on academic renewal petitions.

## Undergraduate Readmissions

Contact Information and Office Locations (for all campuses)
Phone: 480.965.7788
Fax: 480.965.3610
Location: Student Services Building, Room 112, Tempe campus (map [10])
Leave of Absence
Undergraduate Student Leave of Absence [11]
If a student needs to take an extended break from their studies at the University they may be eligible for a Leave of Absence. The Undergraduate Student Leave of Absence (LOA) policy assists and encourages students to return and graduate after an absence of more than two consecutive fall and spring semesters from ASU. Students who have more than two consecutive semesters of absence and who have been granted a leave of absence need not apply for readmission or pay readmission fees and may participate in their regularly scheduled registration/enrollment period upon return to the University.

Source URL: http://students.asu.edu/readmission
Links:[1] http://students.asu.edu/taxonomy/term/160
[2] http://students.asu.edu/taxonomy/term/164
[3] http://my.asu.edu
[4] http://global.asu.edu/current
[5] https://webapp4.asu.edu/ugapp/mainmenulogic
[6] http://transfer.asu.edu/credits
[7] http://students.asu.edu/freshman/requirements
[8] http://students.asu.edu/transfer-admissions-information
[9] http://students.asu.edu/iso@asu.edu
[10] http://www.asu.edu/map/interactive/?campus=tempe\&building=SSV
[11] http://students.asu.edu/leave-absence
Published on ASU Academic Catalog (http://catalog.asu.edu)

## Attendance

The instructor has full authority to decide whether class attendance is required.
Source URL: http://catalog.asu.edu/attendance
Published on ASU Academic Catalog (http://catalog.asu.edu)

## Arizona General Education Curriculum (AGEC)

The Arizona public community colleges and universities have agreed upon a common structure for a general education core. This curriculum provides students attending any Arizona public community college with the opportunity to build a general education program that is transferable to any other state institution without loss of credit. This common agreement is called the Arizona General Education Curriculum (AGEC).
The AGEC is composed of 35 semester hours of lower-division general education course work in which a student may prepare for transfer.
The AGEC has three forms: AGEC-A, AGEC-B, and AGEC-S. Refer to http://www.aztransfer.com/AGECReqs [1] for a detailed description of each AGEC.
Community colleges are responsible for certifying the date of completion of the AGEC on the official institutional transcripts.
Completion of the appropriate AGEC will fulfill university lower-division general education requirements of the baccalaureate degree with which the AGEC articulates but may not apply to degrees articulated with the Transfer Guide Pathway TG-XR. Students completing the AGEC will still be required to fulfill lower-division program requirements and prerequisites within their college and major/minor area of study. To complete a degree program most efficiently, students should select courses that concurrently satisfy AGEC and major requirements.
Completion of any AGEC guarantees admission to the university provided that a GPA of 2.00 (for Arizona residents) or 2.50 (for nonresidents) has been achieved. AGEC completion, however, does not guarantee admission to any specific university program. Many majors (e.g., architecture, engineering, business, fine/creative arts, or health professions) have significant prerequisites and/or program requirements that must be completed before a student may be admitted to upper-division course work. Community college students who are undecided about which of the universities they plan to attend or what program of study they intend to pursue are advised to explore educational options while they complete the AGEC. In all cases, students have the responsibility for selecting general education course work that is relevant to the requirements of their intended major and degree.
Students who complete both the AGEC and an approved associate's degree will be assigned junior-class standing by the state universities. Junior-class standing is based on the number of semester credits a student has earned and does not necessarily indicate the remaining number of semester credits needed to complete degree requirements. Course prerequisites, major requirements, and upper-division requirements continue to be specified by each university. Appropriate sequencing of courses and timely completion of course prerequisites are essential to ensure efficient progress toward a baccalaureate degree. Students who have identified the university they plan to attend and/or a major area of study are advised to fulfill requirements and prerequisites identified by these programs through transfer guides and/or curriculum check sheets provided by the state universities. The AGEC does not replace articulation agreements developed to enhance the transfer process between specific institutions, e.g., Associate Transfer Partnership Degrees (ATP). Nor does the AGEC eliminate the possibility that students who have identified the university they plan to attend and/or a major area of study will follow transfer guides provided by the state universities.
Source URL: http://catalog.asu.edu/agec
Links:[1] http://www.aztransfer.com/AGECReqs
Course Load and Concurrent Enrollment

## Course

A minimum full-time course load for an undergraduate student is 12 credit hours. The maximum course load for which a student may register is 18 credit hours (with the exception of a 19-hour maximum for students enrolled in the Ira A. Fulton Schools of Engineering and College of Technology and Innovation). A student wishing to register for more than the maximum must petition the standards committee of the college in which the student is enrolled and must obtain an approved overload before registration.
Summer Session Semester Hour Load

The summer session credit hour load limit is seven credit hours for each six-week session, nine credit hours for the eight-week session, and may not exceed a total of 14 credit hours for any combination of sessions.

## Graduate Credits earned by Undergraduate students

ASU undergraduate students who have achieved senior status (cannot be post-baccalaureate) with a cumulative GPA of 3.00 or higher may count up to nine credit hours of graduate-level course work toward their graduate degree at ASU (pre-admission credit hours). Only graduate courses with a grade of "B" (3.00) or higher may be included on a graduate plan of study. Pre-admission graduate courses cannot be used to meet any baccalaureate graduation requirements. Before registering for these courses, the student must submit a petition through their academic unit. Permission to take a pre-admission graduate course does not guarantee admission to a graduate degree program or that the course may be used toward graduate degree requirements.

## USE of GRADUATE Course Credit by Undergraduates

Graduate course credit earned by an undergraduate student that is used to fulfill requirements for an undergraduate degree program cannot also be used in a graduate degree program unless the student is enrolled in an approved $4+1$ program. Students must contact their advisor before enrolling in a graduate course they wish to use towards a future graduate program at ASU.

## Concurrent Enrollment

Provided that the other institution's regulations concerning enrollment, graduation requirements and transfer of credits are not violated, a student may enroll in classes at other institutions or in independent learning courses while enrolled at ASU. However, the student is urged to seek advising before concurrent enrollment to assure orderly progress toward a degree. If total credits exceed the maximum course load, prior permission must be granted by the college standards committee.

## Enrollment Verification Guidelines

The registrar is responsible for verifying enrollment according to general guidelines, see Enrollment Verification [1].
Source URL: http://catalog.asu.edu/course load
Links:[1] http://students.asu.edu/enrollment-verification

## Credit by Examination

Students may receive credit for an ASU course by taking an examination in place of the actual course. Some exams can be taken prior to admission to ASU. Information about each type of exam, the courses that are equivalent, and other conditions that may apply to credit being awarded is provided below.

- A student may earn no more than 60 hours of credit by examination for any or all programs, including ASU comprehensive and proficiency exams.
- Credit will not be awarded for any course in which the student has been given credit from any educational institution.
- Credit will not be granted for a course taken at an education institution after credit by examination has been awarded. Exception: Students who take the advanced placement exams, however, may choose either 1) to have the credit earned by advanced placement kept in their cumulative University hours or 2) to complete the ASU course and have its credit and grade instead, regardless of which order the test or course are taken. (See the Advanced Placement section below for additional details on the exam and its equivalent scores.)
- Credit may not be received for a lower-level or prerequisite course when credit has already been received in a higher-level course within the same field.
- Only credit earned by comprehensive examination will count toward the resident credit requirement for graduation.

College-level Examination Program (CLEP) - can be taken before or during enrollment at ASU.
Advanced Placement (AP) - taken during secondary school or before enrollment at ASU.
DANTES or DSST(Defense Activity for Nontraditional Education Support Subject Standardized Test) - taken by military or approved government personnel before or during enrollment at ASU.
International Baccalaureate (IB) Diploma/Certificate - earned by students of an International Baccalaureate ${ }^{\circledR}$-approved school before enrollment at ASU.
Comprehensive Examinations - can be taken by current ASU students.
Proficiency Examinations - can be taken by current ASU students.
For information about placement testing for Mathematics and English classes prior to orientation, please refer to the Placement and Testing Requirements in the ASU Catalog.

## College-level Examination Program (clep)

Students who have taken a College-Level Examination of the College Entrance Examination Board may receive university credit. The table of CLEP credit applies to all students enrolled in the university for the first time in August 1975 and any student enrolling thereafter. CLEP examination credit is not given where it duplicates credit previously earned by the student at the university or accepted by the university for work done elsewhere. All examinations are given monthly by University Testing and Scanning Services. The General Studies requirement in natural science (SQ and SG) and literacy and critical inquiry (L) are not satisfied by CLEP. There is no limit to the number of CLEP credits that can be used to fulfill the other parts of the General Studies requirement. A student who
has received ASU credit for a course due to Special Programs credit may not duplicate the credit by enrolling in the same class for credit at ASU or transferring it to another institution.

## Subject Examinations

To obtain credit or placement for all subject exams except English, French, German, and Spanish, a student must receive a score of 50 (Computer Based Testing [CBT] scale) or higher. To obtain credit for College Composition, a student must receive a standard score of 610 (1978 scale), 500 (1986 scale), or 50 (CBT scale). For test scores for French, German, and Spanish, see the CLEP credit table, below.
All equivalency is subject to future review and possible catalog change. For more information, contact University Testing and Scanning Services at 480-965-7146, or visit 1130 E. University Dr., Suite 204, Tempe, AZ.
CLEP Credit (click to expand)

| Examinations* | Semester <br> Hours | Equivalency |
| :---: | :---: | :---: |
| American Government | 3 | POS 110 |
| American Literature | 3 | Elective credit |
| Analyzing and Interpreting Literature | 3 | Elective credit |
| Biology | 8 | BIO 181, 182 |
| Calculus | $\begin{aligned} & 3 \\ & 4 \end{aligned}$ | MAT 265 <br> MAT 270 |
| Chemistry | 8 | CHM 113, 116 |
| College Algebra | 3 | MAT 117 |
| College Composition | 3 | ENG 101 |
| College Composition - Modular | 0 | No Credit |
| College Mathematics | 3 | MAT 142 |
| English Literature | 3 | Elective credit |
| French Language | 4 <br> 8 <br> 12 <br> 16 | FRE 101 (Students must score 50-54.) <br> FRE 101, 102 (Students must score 55-61.) FRE 101, 102, 201 (Students must score 62-65.) FRE 101, 102, 201, 202 (Students must score 66 or higher.) |
| German Language | 4 <br> 8 <br> 12 <br> 16 | GER 101 (Students must score 39-45.) <br> GER 101, 102 (Students must score 46-50.) GER 101, 102, 201 (Students must score 51-59.) GER 101, 102, 201, 202 (Students must score 60 or higher.) |
| History of the United States I-Early Colonization to 1877 | 3 | HST 109 |
| History of the United States II-1865 to the Present | 3 | HST 110 |
| Human Growth and Development | 3 | CDE 232 |
| Humanities | 0 | No credit |
| Information Systems and Computer Applications | 3 | Elective credit |


| Introduction to Educational Psychology | 0 | No credit |
| :--- | :--- | :--- |
| Introductory Business Law | 3 | Elective credit |
| Introductory Psychology | 3 | PGS 101 |
| Introductory Sociology | 3 | SOC 101 |
| Natural Sciences | 8 | Elective credit |
| Precalculus (replaces College Algebra/Trigonometry) | 3 | MAT 170 |
| Principles of Accounting | 6 | Elective credit |
| Principles of Macroeconomics | 3 | ECN 211 |
| Principles of Management | 0 | No credit |
| Principles of Marketing | 3 | No credit |
| Principles of Microeconomics | 6 | ECN 212 |
| Social Sciences and History | 4 | Elective credit |
| Spanish Language | SPA 101 (Students must score 50-54.) <br> SPA 101, 102 (Students must score 55-65.) <br> SPA 101, 102, 201 (Students must score 66-67.) |  |
| SPA 101, 102, 201, 202 (Students must score 68 or |  |  |
| higher.) |  |  |
| Western Civilization I-Ancient Near East to 1648 | 3 | HST 104 |
| Western Civilization II-1648 to the Present | 3 | HST 102 or 103 |

* All test scores are posted initially as Tempe campus course equivalents and will be honored at any ASU campus the student may attend.


## Advanced Placement

Students who have taken an advanced placement (AP) course of the College Entrance Examination Board (CEEB) in their secondary school and who have taken an AP Examination of the CEEB may receive university credit. No credit is given for any examination with a score of 2 or 1 . There is no limit to the number of AP credits that can be used to meet the General Studies requirement, including the requirements in natural sciences (SQ and SG) and literacy and critical inquiry (L).
When the scores are received by the university directly from the CEEB, credit is awarded as shown in the Advanced Placement Credit table below.
Advanced Placement Credit (click to expand)

| Examination* | Score | Semester Hours | Equivalency |
| :--- | :--- | :--- | :--- |
| Art-History | 5 or 4 | 6 | ARS 101, 102 |
|  | 3 | 3 | ARS 101 or 102 |
| Biology | 5 or 4 | 8 | BIO 181, 182 |
|  | 3 | 4 | BIO 100 |
| Calculus AB | 5,4, or 3 | 4 | MAT 270 |
| Calculus BC | 5 or 4 | 8 | MAT 270, 271 |
|  | 3 | 4 | MAT 270 |


| Chemistry | 5 or 4 | 8 | CHM 113, 116 |
| :---: | :---: | :---: | :---: |
|  | 3 | 4 | CHM 113 |
| Chinese Language and Literature | $\begin{aligned} & 5 \\ & 4 \\ & 3 \end{aligned}$ | $\begin{aligned} & 20 \\ & 15 \\ & 10 \end{aligned}$ | $\begin{aligned} & \text { CHI 101, 102, 201, } 202 \\ & \text { CHI 101, 102, } 201 \\ & \text { CHI 101, } 102 \end{aligned}$ |
| Comparative Government and Politics | 5 or 4 | 3 | POS 150 |
| Computer Science A | 5 or 4 | 3 | CSE 110 |
| Computer Science AB | 5 or 4 | 6 | CSE 110, 205 |
| English Language | 5 or 4 | 6 | ENG 101, 214 |
| English Literature | 5 or 4 | 6 | ENG 101, 204 |
| Environmental Science | 5 or 4 | 3 | PLB 320 |
| European History | 5 or 4 | 6 | HST 103 and 104 |
| French Language and Culture | $\begin{aligned} & 5 \\ & 4 \\ & 3 \end{aligned}$ | $\begin{aligned} & 14 \\ & 11 \\ & 8 \end{aligned}$ | FRE 201, 202, 311, 312 <br> FRE 201, 202, 311 <br> FRE 201, 202 |
| French-Literature | $\begin{aligned} & 5 \\ & 4 \\ & 3 \end{aligned}$ | $\begin{aligned} & 18 \\ & 12 \\ & 8 \end{aligned}$ | FRE 111, 201, 202, 321, 322 <br> FRE 111, 201, 202 <br> FRE 201, 202 |
| German Language and Culture | $\begin{aligned} & 5 \\ & 4 \\ & 3 \end{aligned}$ | $\begin{aligned} & 14 \\ & 11 \\ & 8 \end{aligned}$ | GER 201, 202, 311, 312 GER 201, 202, 311 GER 201, 202 |
| Human Geography | 5,4 or 3 | 3 | GCU 102 |
| Japanese Language and Culture | $\begin{aligned} & 5 \\ & 4 \\ & 3 \end{aligned}$ | $\begin{aligned} & 20 \\ & 15 \\ & 10 \end{aligned}$ | JPN 101, 102, 201, 202 JPN 101, 102, 201 JPN 101, 102 |
| Latin: Vergil | $\begin{aligned} & 5 \\ & 4 \\ & 3 \end{aligned}$ | $\begin{aligned} & 16 \\ & 12 \\ & 8 \end{aligned}$ | LAT 101, 102, 201, 202 LAT 101, 102, 201 LAT 101, 102 |
| Latin: Vergil | $\begin{aligned} & 5 \\ & 4 \\ & 3 \end{aligned}$ | $\begin{aligned} & 16 \\ & 12 \\ & 8 \end{aligned}$ | LAT 101, 102, 201, 202 LAT 101, 102, 201 LAT 101, 102 |
| Macroeconomics | 5 or 4 | 3 | ECN 211 |
| Microeconomics | 5 or 4 | 3 | ECN 212 |
| Music Theory | 5 or 4 | 3 | MTC 125 |
| Physics B | 3,4 or 5 | $\begin{aligned} & 4 \\ & 8 \end{aligned}$ | PHY 111, 113 <br> PHY 111, 113 and 112, 114 |
| Physics-AP Mechanics C | 3,4 or 5 | 4 | PHY 111, 113 |
| Physics-AP Electricity and Magnetism C | 3,4 or 5 | 8 | PHY 112, 114 |
| Psychology | 5 or 4 | 3 | PGS 101 |
| Spanish-Language | 5 4 3 | $\begin{aligned} & 14 \\ & 11 \\ & 8 \end{aligned}$ | SPA 201, 202, 311, 312 SPA 201, 202, 311 SPA 201, 202 |


| Spanish-Literature | 5 | 15 | SPA 111, 201, 202, |
| :--- | :--- | :--- | :--- |
|  | 4 |  | SPA 111, 201, 202 |

* All test scores are posted initially as Tempe campus course equivalents and will be honored at any ASU campus the student may attend.


## Dantes/DSST

Students who have taken a DSST (DANTES [Defense Activity for Nontraditional Education Support] Subject Standardized Test) may receive university credit. Credit is awarded for score results at or above the American Council on Education's recommended score if the subject examination is applicable to a program of study at ASU or may be assigned elective credit. To receive credit, a transcript showing the DSST results must be received by ASU directly from the Educational Testing Service.
Dantes/DSST (click to expand)

| DSST Exam | ASU Credit | Score | Semester Hours |
| :---: | :---: | :---: | :---: |
| A History of the Vietnam War | No credit |  |  |
| An Introduction to the Modern Middle East | Elective credit | 47 | 3 |
| Art of the Western World | ARS 101 or 102 | 48 | 3 |
| Astronomy | No credit |  |  |
| Business Ethics and Society | No credit |  |  |
| Business Law II | No credit |  |  |
| Business Mathematics | Elective credit | 48 | 3 |
| Criminal Justice | CRJ 100 | 49 | 3 |
| Environment and Humanity: The Race to Save the Planet | Elective credit | 46 | 3 |
| Ethics in America | Elective credit | 46 | 3 |
| Foundations of Education | Elective credit | 46 | 3 |
| Fundamentals of College Algebra | MAT 117 | 47 | 3 |
| Fundamentals of Counseling | Elective credit | 48 | 3 |
| General Anthropology | No credit |  |  |
| Here's to Your Health | No credit |  |  |
| Human Resource Management | No credit |  |  |
| Human/Cultural Geography | GCU 102 | 48 | 3 |


| Introduction to Business | Elective credit | 46 | 3 |
| :---: | :---: | :---: | :---: |
| Introduction to Computing | Elective credit | 45 | 3 |
| Introduction to Law Enforcement | CRJ 230 | 45 | 3 |
| Introduction to World Religions | No credit |  |  |
| Lifespan Developmental Psychology | Elective credit | 46 | 3 |
| Management Information Systems | Elective credit | 46 | 3 |
| Money and Banking | No credit |  |  |
| Organizational Behavior | Elective credit | 48 | 3 |
| Personal Finance | Elective credit | 46 | 3 |
| Physical Geology | No Credit |  |  |
| Principles of Finance | No Credit |  |  |
| Principles of Financial Accounting | No Credit |  |  |
| Principles of Physical Science I | Elective credit | 47 | 3 |
| Principles of Public Speaking | Elective credit | 47 | 3 |
| Principles of Statistics | STP 226 | 48 | 3 |
| Principles of Supervision | Elective credit | 46 | 3 |
| Rise and Fall of the Soviet Union | Elective credit | 45 | 3 |
| Substance Abuse (formerly Drug and Alcohol Abuse) | No credit |  |  |
| Technical Writing | Elective credit | 46 | 3 |
| The Civil War and Reconstruction | Elective credit | 47 | 3 |
| Western Europe since 1945 | No credit |  |  |

## International Baccalaureate (IB) Diploma/Certificate

Students who present an International Baccalaureate Diploma/Certificate may qualify for university credit, depending on the level of the examination and the grade received. Arizona State University grants credit for higher-level courses only. A grade of 5 qualifies the student to receive credit for up to two introductory courses while a grade of 4 qualifies a student to receive credit for one introductory course. No credit is awarded for English as a Second Language (English B). Credit is awarded according to the International Baccalaureate Diploma/Certificate Credit table below.
International Baccalaureate Diploma/Certificate Credit (click to expand)

| Examination* | Score | Semester Hours | Equivalency |
| :---: | :---: | :---: | :---: |
| Art/Design | $\begin{aligned} & 7,6 \text { or } 5 \\ & 4 \end{aligned}$ | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ | ART 111, 112 ART 112 |
| Biology | $\begin{aligned} & 7,6 \text { or } 5 \\ & 4 \end{aligned}$ | $\begin{aligned} & 8 \\ & 4 \end{aligned}$ | $\begin{aligned} & \text { BIO 181, } 182 \\ & \text { BIO } 187 \end{aligned}$ |
| Chemistry | $\begin{aligned} & 7,6 \text { or } 5 \\ & 4 \end{aligned}$ | $\begin{aligned} & 8 \\ & 4 \end{aligned}$ | $\begin{aligned} & \text { CHM 113, } 116 \\ & \text { CHM } 113 \end{aligned}$ |
| Classical Languages (Latin) | $\begin{aligned} & 7,6 \text { or } 5 \\ & 4 \end{aligned}$ | 8 4 | LAT 101, 102 LAT 101 |


| Economics | $\begin{aligned} & 7,6 \text { or } 5 \\ & 4 \end{aligned}$ | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ | $\begin{aligned} & \text { ECN 211, } 212 \\ & \text { ECN } 211 \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| English A | 7,6 or 5 | 6 | ENG 101, 214 |
|  | 4 | 3 | ENG 214 |
| English B | No credit | 0 | None |
| Geography | 7,6,5 or 4 | 3 | GCU 102 |
| History-American | $\begin{aligned} & 7,6 \text { or } 5 \\ & 4 \end{aligned}$ | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ | HST 109, 110 HST 109 |
| History-East and Southeast and Oceania | $\begin{aligned} & 7,6 \text { or } 5 \\ & 4 \end{aligned}$ | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ | $\begin{aligned} & \text { HST 107, } 240 \\ & \text { HST } 107 \end{aligned}$ |
| History-European | $\begin{aligned} & 7,6 \text { or } 5 \\ & 4 \end{aligned}$ | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ | HST 103, 104 HST 103 |
| Mathematics | 7,65, or 4 | 4 | MAT 270 |
| Music | 7,65, or 4 | 3 | MTC 125 |
| Modern Languages: Chinese | 7 | 15 | CHI 102, 201, 202 |
|  | 6 | 10 | CHI 102, 201 |
|  | 5 | 5 | CHI 102 |
| Modern Languages: French | $\begin{aligned} & 7 \\ & 6 \\ & 5 \end{aligned}$ | $\begin{aligned} & 16 \\ & 12 \\ & 8 \end{aligned}$ | FRE 101, 102, 201, 202 FRE 101, 102, 201 FRE 101, 102 |
| Modern Languages: German | $\begin{aligned} & 7 \text { or } 6 \\ & 5 \end{aligned}$ | $\begin{aligned} & 8 \\ & 4 \end{aligned}$ | GER 101, 102 GER 101 |
| Modern Languages: Japanese | $\begin{aligned} & 7 \\ & 6 \\ & 5 \end{aligned}$ | $\begin{aligned} & 15 \\ & 10 \\ & 5 \end{aligned}$ | JPN 102, 201, 202 JPN 102, 201 JPN 102 |
| Modern Languages: Spanish | $\begin{aligned} & 7,6 \\ & 5 \end{aligned}$ | $\begin{aligned} & 8 \\ & 4 \end{aligned}$ | $\begin{aligned} & \text { SPA 101, } 102 \\ & \text { SPA } 101 \end{aligned}$ |
| Physics | $\begin{aligned} & 7,6 \text { or } 5 \\ & 4 \end{aligned}$ | $\begin{aligned} & 8 \\ & 4 \end{aligned}$ | $\begin{aligned} & \text { PHY 111, 112, 113, } 114 \\ & \text { PHY 111, } 113 \end{aligned}$ |
| Psychology | 7,6,5 or 4 | 3 | PGS 101 |
| Social and Cultural Anthropology | 7,6,5 or 4 | 3 | ASB 102 |
| Theatre | 7,6,5 or 4 | 3 | THE 100 |
| Visual Arts | $\begin{aligned} & 7,6 \text { or } 5 \\ & 4 \end{aligned}$ | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ | ART 111, 112 ART 112 |

* No credit is awarded if the language is the student's native language.


## Comprehensive Examinations

A comprehensive examination is intended to permit a student to establish academic credit in a field in which the student has gained experience or competence equivalent to an established university course. Applications are given only for courses listed in the current catalog and only for courses in which a comprehensive examination can serve as a satisfactory measure of accomplishment. A number of restrictions apply. To be eligible to apply to take a comprehensive examination to establish undergraduate course equivalence, a student must:

1. Have earned not more than 60 semester hours of credit through comprehensive, CLEP, international baccalaureate, and advanced placement examinations.
2. Have earned no credit for a duplicate course.
3. Have earned no credit for a course for which this course is a prerequisite.

The decision on the suitability of course material for a comprehensive examination, the development of a comprehensive examination, and the administration of an examination are strictly departmental functions. An application is for one course only. The student should complete an application form with the number, title, and number of semester hours for the course. When completed, the application must be approved by the student's advisor and the chair of the department responsible for offering the course.
The student must then pay the stated fee for such examinations at Cashiering Services. The receipt must be taken to the departmental office.
The examination is prepared by the instructor who normally conducts the course, and it is comprehensive in nature and scope. The instructor and other experts designated by the chair grade the examination, using letter grades " $\mathrm{A}+$," " A, , " $\mathrm{A}-$," " $\mathrm{B}+$," " B ," " $\mathrm{B}-$," " $\mathrm{C}+$," " $C$," " $D$, " or " $E$." If the grade is " $C$ " or higher, a mark of " $Y$ " is entered on the student's permanent record; otherwise, no entry is made. Credit by examination is indicated as such on the record. The student is notified by mail of the result of the examination. In cases of failure (" $D$ " or " $E$ "), the student is not given an opportunity to repeat the examination.
A student pursuing a second baccalaureate degree may not receive credit by comprehensive examination, but with prior approval of the college, the student may use the examination to waive a course requirement if a grade of " $C$ " or higher is earned.

## Proficiency Examinations

Proficiency examinations and auditions are given

1. To waive a course requirement.
2. To validate certain transfer credits in professional programs.
3. To determine a student's ability in a field where competence is an important consideration.

Detailed information may be obtained from the dean's office of the college in which the student is regist
Source URL: http://catalog.asu.edu/credit exam

## Links:

[1] http://catalog.asu.edu/credit_exam\#CLEP
[2] http://catalog.asu.edu/credit_exam\#AP
[3] http://catalog.asu.edu/credit_exam\#DANTES
[4] http://catalog.asu.edu/credit_exam\#IB
[5] http://catalog.asu.edu/credit_exam\#COMP
[6] http://catalog.asu.edu/credit_exam\#PRO
[7] http://catalog.asu.edu/test_req
[8] http://www.asu.edu/uts/e_clep.htm

## Placement and Testing Requirements

## English Placement

All new, transfer, or readmitted undergraduate students who plan to enroll for seven or more semester hours must meet one of the following testing requirements. Students who fail to meet at least one of these requirements are not allowed to register for any course the following semester:

- Take the ACT English or SAT verbal examination, and have scores submitted to ASU.
- Receive a score of 4 or 5 for the advanced placement examination in English offered by the College Entrance Examination Board, and have scores submitted to ASU.
- Take the CLEP general examination in College Composition, earning a score that qualifies for equivalency with ENG 101, and have scores submitted to ASU.
- Have previously taken ENG 101, 102, 105, 107, or 108 at ASU; or have previously earned a grade of " $\gamma$ "; or be currently enrolled in WAC 101 or 107 at ASU. If the course was taken before 1980, contact the Recording Section, in SSV 142, before registering for classes.
- Transfer a course equivalent to ENG 101, 102, 105, 107 or 108 with a grade of "C" (2.00) or higher. An official transcript showing the grade must be received at ASU. If a student transfers an equivalent composition course from a public Arizona community college or university, or an articulated equivalent course from another instution, the equivalency is automatically posted and the student need not take further action. A student transferring a non-articulated composition course from any other college or university may be required to submit documentation to determine equivalency of the course(s). After consultation with an advisor, if evaluation is necessary, the student should provide a copy of both the transfer transcript and the catalog description of the course to the Writing Programs Office in LL 314, 480-965-3853 on the Tempe campus or the Writing Programs Office in FABN 201A, 602-543-6091 on the West campus.
- International students from non-English-speaking countries must take ENG 107 (or WAC 107 followed by ENG 107 the second semester) in the first semester at ASU, unless they have taken and transferred an equivalent composition course from a college or university in the U.S. Such a course must be evaluated for equivalency by the Composition Office.
Admitted ASU students who have not sent official ACT or SAT scores to ASU may need to take the WritePlacer section of the ACCUPLACER Placement Test [1] for placement into a first-year English composition course.
Math Placement

ASU requires all incoming freshmen to complete the ALEKS Placement Exam [2] for mathematics prior to orientation in order to determine the appropriate math course for enrollment.
Source URL: http://catalog.asu.edu/test req
Links:[1] http://asu.edu/uts/e_accuplacer.htm
[2] http://students.asu.edu/node/7768
Retention and Academic Standards
Class Standing
A student's class standing is determined by the number of hours earned, as shown in the table below.
Class Standing

| Student | Hours Earned |
| :--- | :--- |
|  |  |
| Freshman | 24 or fewer semester hours earned |
| Sophomore | 25 to 55 semester hours earned |
| Junior | 56 to 86 semester hours earned |
| Senior | 87 or more semester hours earned |
| Graduate | Bachelor's degree from accredited institution |

## Academic Good Standing

For the purpose of retention, academic good standing for degree-seeking students is defined in the table below.
Academic Good Standing

| Total Earned Hours | Minimum Cumulative GPA |
| :--- | :--- |
| 24 or fewer | 1.60 |
| 25 to 55 | 1.75 |
| 56 or more | 2.00 |

A student who does not maintain the minimum GPA standard is placed on academic probation or is disqualified. A student on academic probation is in conditional good standing and is permitted to enroll. A student who has been disqualified is not in academic good standing and is not permitted to enroll for fall or spring semesters.
To transfer from one college to another within the university or to be eligible for readmission, a student must have an ASU GPA of 2.00 or higher. The GPA determining good standing is computed on courses taken only at ASU.

For purposes of retention or transfer, an individual college may set higher GPA standards; otherwise, the university standards prevail. See the college sections of this catalog or contact the college deans' offices for statements regarding college retention standards.

## Dean's List

Undergraduate students who earn 12 or more graded semester hours ("A+," "A," "A-," "B+," "B," "B-," "C+," "C," "D," or "E") during a semester in residence at ASU with a GPA of 3.50 or higher are eligible for the Dean's List. A notation regarding Dean's List achievement appears on the unofficial transcript.

## Satisfactory Academic Progress

The university is required to publish and enforce standards of satisfactory academic progress for certain students (e.g., student athletes, students receiving financial aid, and students receiving veterans benefits).
Certification of satisfactory progress for student athletes is verified by the academic advisor and the dean's designee for certifying satisfactory progress. Certification of satisfactory progress for students receiving financial aid or veterans benefits is verified by Student Financial Assistance or the Veterans Services section, respectively. Students should contact their advisors or the appropriate office for additional information on satisfactory progress requirements.

## Probation

A student's college assumes responsibility for enforcing academic standards and may place on probation any student who has failed to maintain good standing as previously defined. For purposes of probation and retention, an individual college may set higher GPA standards. A student on academic probation is required to observe any rules or limitations the college may impose as a condition for
retention.

## Ineligible

A student who is placed on ineligible status at the end of a semester is considered ineligible to continue in the college/school at the end of the following semester even if the student meets ASU good standing requirements but not the conditions imposed for retention by the college/school. At the close of the semester, a student deemed ineligible will receive a letter from the college/school outlining options available for continuing at ASU in another college.
Ineligibility is exercised at the discretion of the college. An ineligible student is notified by the dean of the college and is not allowed to register in a fall or spring semester at the university, unless arrangements are made to transfer to another college. A student who has already registered for a future semester will be withdrawn from classes. An ineligible student who does not change to a different major may not attend ASU. A student who is ineligible may apply for reinstatement to the college standards committee. An ineligible student may not attend ASU as a nondegree student.

## Disqualification

A student who is placed on probation at the end of a semester is subject to disqualification by the college/school at the end of the following semester if the conditions imposed for retention are not met.
Disqualification is exercised at the discretion of the college/school. A disqualified student is notified by the dean of the college and is not allowed to register in a fall or spring semester at the university. If the student has already registered for a future fall or spring semester, the registration is canceled. A student who has been disqualified may apply for reinstatement to the college standards committee. A student who is disqualified may not attend as a nondegree student. If a disqualified student elects to attend another university, any credits earned there will not affect the ASU cumulative GPA. A course repeated elsewhere will not result in a replacement of a grade earned at ASU. Disqualified students consult with an academic advisor to determine eligibility to attend ASU in the summer or winter session to raise the ASU cumulative GPA.

## Reinstatement

A disqualified or ineligible student who has skipped a fall or spring semester must follow the procedures for readmission. See Readmission to the University [1].
A disqualified or ineligible student who has not skipped a semester may submit an Application for Reinstatement to the college of his or her major. If the student wishes to transfer to a different college, he or she may submit an Application for Reinstatement to the college into which he or she wishes to transfer. An ineligible student who does not skip a fall or spring semester must follow the ineligible procedures. See ineligible status.

## Academic Integrity

Find out more about academic integrity [2].
Source URL: http://catalog.asu.edu/retention standing
Links: [1] http://students.asu.edu/readmission
[2] http://provost.asu.edu/academicintegrity
Academic Integrity Definition

## What is a violation of the academic integrity policy?

The ASU student academic integrity policy lists violations in detail. These violations fall into five broad areas that include but are not limited to:

- Cheating on an academic evaluation or assignment.
- Plagiarizing.
- Academic deceit, such as fabricating data or information.
- Aiding academic integrity policy violations and inappropriately collaborating.
- Falsifying academic records.


## What is not a violation of the academic integrity policy?

Not all inappropriate behavior in the academic setting is an academic integrity policy violation.

## Student Code of Conduct

Violations of the ASU Student Code of Conduct, other than the provision concerning academic dishonesty, are more generally considered inappropriate behavior. The Office of Student Rights and Responsibilities reviews and sanctions these matters. If a student violates both the academic integrity provision and additional provisions of the Student Code of Conduct, both the college and the Office of Student Rights and Responsibilities will review the matter. Each independently makes determinations concerning violations and appropriate sanctions.

## Research

For graduate students and undergraduates involved in research, there can be overlapping areas between Academic Integrity Policy violations, responsible conduct of research and research misconduct. The five areas listed above describe the kinds of Academic

Integrity Policy violations and are handled under the ASU Student Academic Integrity Policy by faculty members, colleges and the provost.
If a student is working on a federally funded research project, some of these items may also be considered misconduct in research. Misconduct is defined as:

Fabrication, falsification, plagiarism and other practices that seriously deviate from those that are commonly accepted within the academic community for proposing, conducting or reporting research. Instances of honest error and honest differences in interpretations or judgments of data are not considered misconduct. (From RSP 004: Definitions)
At ASU, the Office of the Associate Vice President of Research handles misconduct in research. A student who violates both ASU's Misconduct in Research Policy and Student Academic Integrity Policy will be reviewed by both the college and the Office of the Associate Vice President of Research. Each independently makes determinations concerning violations and appropriate sanctions. In addition, some actions might be considered violations of the norms of responsible conduct of research, but not Academic Integrity Policy violations or misconduct in research. Many of these incidents fall into the general category of "collaborator disputes." For example, if a doctoral graduate of ASU continued a line of research begun at ASU in a new lab external to ASU, and the ASU mentor objected, generally speaking the matter would be addressed as a collaborator dispute, rather than as an Academic Integrity Policy violation or misconduct in research. Many conflicts over appropriate authorship credit on publications also fall into this area.
Source URL: http://provost.asu.edu/academicintegrity/defined

## Student Obligations to Academic Integrity

Each student must act with honesty and integrity, and must respect the rights of others in carrying out all academic assignments. A student may be found to have engaged in academic dishonesty if, in connection with any Academic Evaluation or academic or research assignment (including a paid research position), he or she:

- Engages in any form of academic deceit;
- Refers to materials or sources or uses devices (e.g., computer disks, audio recorders, camera phones, text messages, crib sheets, calculators, solution manuals, materials from previous classes, or commercial research services) not authorized by the instructor for use during the Academic Evaluation or assignment;
- Possesses, reviews, buys, sells, obtains, or uses, without appropriate authorization, any materials intended to be used for an Academic Evaluation or assignment in advance of its administration;
- Acts as a substitute for another person in any Academic Evaluation or assignment;
- Uses a substitute in any Academic Evaluation or assignment;
- Depends on the aid of others, including other students or tutors, in connection with any Academic Evaluation or assignment to the extent that the work is not representative of the student's abilities;
- Provides inappropriate aid to another person in connection with any Academic Evaluation or assignment, including the unauthorized use of camera phones, text messages, photocopies, notes or other means to copy or photograph materials used or intended for Academic Evaluation;
- Engages in Plagiarism;
- Uses materials from the Internet or any other source without full and appropriate attribution;
- Permits his or her work to be submitted by another person in connection with any Academic Evaluation or assignment, without authorization;
- Claims credit for or submits work done by another;
- Signs an attendance sheet for another student, allows another student to sign on the student's behalf, or otherwise participates in gaining credit for attendance for oneself or another without actually attending;
- Falsifying or misrepresenting hours or activities in relationship to an internship, externship, field experience,clinical activity or similar activity; or
- Attempts to influence or change any Academic Evaluation, assignment or academic record for reasons having no relevance to academic achievement.
Source URL: http://provost.asu.edu/academicintegrity/policy/StudentObligations


## Allegations of Academic Dishonesty

This policy is not intended to address differences of opinion over grades issued by an instructor exercising good faith and professional judgment regarding a student's work. Before any action is taken under this Policy that may result in the withdrawal, suspension or expulsion of an international student, both the student and the academic program are advised to consult with the ASU International Student Office.
These procedures are designed to encourage a fair and appropriate response to allegations of academic dishonesty. They may be modified in individual cases, so long as the student is provided an opportunity to respond to allegations of academic dishonesty within a reasonable time after those allegations have been made. An Advisor may accompany the student at any point in the process. The Advisor will not be permitted to participate directly or speak for the student, but may be present during meetings and
hearings.

- Complaint.

Anyone with a good faith basis for believing that a student has violated this policy may report the alleged violation to the responsible instructor, chair, dean, director or designee. The person who pursues the allegation is called the "Initiator" in this policy. If for any reason, an Initiator is unable or unwilling to continue in that role, another university representative may continue as Initiator.
An individual who has received an allegation may decide not to initiate a complaint. This decision will not prevent another person from becoming the Initiator.

- Response to Complaint.

An instructor who believes that a student has violated this policy in a class for which the instructor is responsible may assign any of the following sanctions:
a reduced grade for an assignment, or a reduced grade for the course.

- If the instructor wants to recommend another sanction set forth in Section IV, including an XE grade, the instructor must forward that recommendation for review by the College/School Board and approval by the Dean, Director or designee. The student and the instructor will be provided an opportunity to provide information to the College/School Board as part of its review.
- At any time, the student and the Initiator may propose a resolution, but the Dean, Director, or designee, may choose to pursue the case on behalf of the University.
- Information regarding the allegation or resolution may be provided to appropriate university representatives.
- If the Initiator and the student are unable to agree on resolution, then the student, the Initiator, or a representative of the Dean or Director may submit the matter to the Dean, Director or designee of the College/School in which the alleged academic dishonesty occurred for review by the College/School Board.
- After a formal request for review has been filed, the Student may remain in class or in the program until the appeal has been resolved. The student will not be given a refund, however, if the student is not successful in the appeal and the decision is made to remove the student from the class, program or university.
- If the matter is not submitted by the student to the Dean, Director or designee for review within 10 days following the time the student is accused of academic dishonesty, the decision or recommendation of the instructor becomes final. If the instructor has submitted a request for an XE or any other sanction to the Dean, Director or designee, and the student has not requested review within 10 days of receiving notice of this request, the Dean, Director, or designee may enter a decision on the request. Only if the decision includes suspension or expulsion from the university will the student be able to request further review.
Source URL: http://provost.asu.edu/academicintegrity/policy/AllegationsofAcademicDishonesty
Review by College/School Board
- Within 10 days after the Student receives a reduced or "XE" grade, or other notice of the alleged academic dishonesty, the Student may submit a written statement to the Dean requesting review of the allegation, the sanction or the proposed sanction by the College/School Board. For the purpose of calculating the time for submitting a matter for review, the 10 day period is counted to include only days that fall within the regular fall or spring semester and do not include the summer sessions or intersession. The Dean may appoint an ad hoc board to conduct the review or may use a standing board. The review will take place during the regular fall or spring semester, unless the parties agree otherwise.
- These procedures should guide the review process, but may be altered by the Chair of the College/School Board in consultation with the Office of General Counsel.
- The Student statement should describe the alleged academic dishonesty, including a factual narrative of events and the dates and times of occurrences and any sanction or proposed sanction. The statement should also include the names of persons having information about relevant circumstances or events, the general nature and description of all evidence, and should be signed by the Student.
- If the Student submits a request for review at the end of a semester, or during the last semester of enrollment, the course grade may be withheld for a reasonable period of time (normally not to exceed six months) until the matter is decided. In situations involving the student's last semester before graduation, the degree may be withheld pending the outcome of the hearing. If a grade or degree will be withheld for any period, the Initiator, Dean, Director, or designee must notify the Registrar's Office.
- The Dean, Director or designee will forward the student's statement to the Chair of the College/School Board.
- If the alleged cheating involves the work of multiple students, the College/School Board may modify these procedures to address the circumstances. The College/School Board should provide prior written notice to all interested parties of any modification of the procedures. A student who has not submitted a request for a review should not expect to benefit from a review requested by another student.

The Chair of the College/School Board will send a copy of the statement to the Initiator, together with a copy of this Policy or with instructions on accessing the policy electronically.
The letter to the student, a copy of which shall also be sent to the Initiator and the department chair, will include the following information:

Statement of time and place when a hearing on the charges will be held by the College/School Board; Requirement that the parties to provide each other and the College/School Board a written list of witnesses and a description of any documents or other evidence they intend to use at the hearing. Unless the Chair provides otherwise, this information must be exchanged at least one calendar week before the hearing.
Prior to the hearing, the College/School Board will also advise the parties in writing of any additional time limitations or procedural requirements.
The Initiator shall have the burden of showing that it is more likely than not that the student engaged in academic dishonesty.
Issues shall be resolved fairly and as promptly as possible under the circumstances.
The hearing will be closed to the public. The student and the Initiator may remain in the hearing throughout the presentation of all evidence and testimony, although the College/School Board Chair may remove either party, any Advisor, or any witness if that person's conduct is disruptive.
The student and the instructor may each have an Advisor present but the Advisors shall not be permitted to address the College/School Board directly, except as the College/School Board Chair deems necessary or appropriate.
The College/School Board Chair has the final authority to resolve procedural disputes that arise. Although formal rules of evidence do not apply to the hearing process, the College/School Board Chair may limit the presentation of irrelevant or cumulative evidence, the number of witnesses and the length of each parties presentation.
The proceedings may be recorded, as determined by the College/School Board Chair.
When necessitated by fairness or extraordinary circumstances, the College/School Board may permit the parties to make arrangements for recorded, written, or telephonic testimony for use in the proceeding.
The hearing procedure will be as follows, unless the College/School Board Chair provides notice to the parties of alternative or supplemental procedures.

The College/School Board Chair will introduce the persons present at the hearing and remind all participants of the requirement that all information received in the hearing must be maintained in confidence.
The College/School Board Chair will read allegation of academic dishonesty.
The College/School Board Chair will make any necessary decisions or clarifications regarding procedure.
Testimony and Evidence Presented by the Initiator.
The Initiator shall offer evidence in support of the allegation.
The Initiator may call witnesses and present evidence.
The student may ask questions of the Initiator or any of the Initiator's witnesses, following each person's presentation.
College/School Board members may ask questions of the Initiator, the student or any of the Initiator's witnesses.
Testimony and Evidence Presented by the Student.
The student shall offer evidence in defense of the allegation.
The student may call witnesses and present evidence.
The Initiator may ask questions of the student or any of the student's witnesses, following each person's presentation.
College/School Board members may ask questions of the student, the Initiator, or any of the student's witnesses.

The College/School Board shall deliberate in private until a majority recommendation is reached and recorded. If the recommendation is not unanimous, dissenting opinions should be reflected in the recommendation submitted to the Dean or Director.

The College/School Board will prepare a written recommendation to the Dean or Director. The recommendation will include the Board's determination as to whether it is more likely than not that the student violated this policy. The decision should also include the College/School Board's findings with respect to the material facts.

If the Board finds a violation, the recommendation should recommend sanctions. The Board may consider prior violations or informal resolutions of previous allegations in its deliberations.

The College/School Board will submit its recommendation to the Dean or Director.
The Dean or Director may dismiss the allegation, may concur with or modify the recommendation or may request further proceedings, but may not make new findings adverse to the student or increase the severity of a sanction, unless the student has previously violated this policy.
After any additional proceedings and within a reasonable time, the Dean or Director will issue a decision. The Dean will provide written notice of the decision to the student, the Initiator, the instructor (if the instructor is not the Initiator), the College/School Board and the department chair (or administrative equivalent).
If the decision imposes a sanction of suspension or expulsion from the university, or revocation of a degree, the notice letter from the Dean or Director will state that the student may appeal the decision by filing a written request for review with the Provost of the campus at which the alleged violation occurred within 10 days of the date of the notice letter. If the student does not submit a written request for review within 10 days, the decision of the Dean or Director becomes final.
Once the student has provided written notice of an appeal of a sanction, the sanction will not be imposed until the appeal has been resolved with the exception that the university may withhold posting of a grade or completion of graduation until the matter has been resolved.
Source URL: http://provost.asu.edu/academicintegrity/policy/CollegeReview

## Sanctions

- Sanctions that may be imposed by an Instructor.
a. Subject to the procedures set forth in section III, an instructor, academic supervisor, or committee responsible for evaluation may impose any of the following sanctions for academic dishonesty:
Reduced or failing grade for assignment,
Reduced or failing grade for course, or
Reduced, failing grade, or no credit for other academic evaluation (e.g., clinical training, comprehensive exam, thesis, dissertation).
Within 10 days after an instructor-imposed sanction is assigned, the student may appeal the sanction to the Dean or Director.
- Sanctions that may be recommended by an instructor. An instructor, academic supervisor, or committee responsible for academic evaluation may recommend other or additional sanctions to the Dean or Director, including assignment of the grade of XE and withdrawal of credit for a previously accepted course or requirement, if the sanctions are otherwise provided in this policy or in the Student Code of Conduct and Disciplinary Procedures.
- Sanctions that may be imposed by a Dean or Director.

After reviewing the recommendation of the School/College Board, a Dean or Director may impose any of the following sanctions for academic dishonesty:

Reduced or failing grade for assignment,
Reduced or failing grade for course,
Reduced or failing grade for other academic evaluation (e.g., clinical training, comprehensive exam, thesis, dissertation),
Assignment of a grade of "XE";
Withdrawal of credit for a previously accepted course or requirement;
Removal from the School or College or from a major or program of study within the School or College, permanently or for a specified period of time.
The decision of the Dean or Director to impose any of the above sanctions is final.

- In addition to the above sanctions, a Dean or Director may recommend to the Provost any of the following sanctions:

Revocation of a degree (the student's official and unofficial transcript may reflect that revocation was the result of academic dishonesty);
Expulsion from the University without expectation of readmission (the student's official and unofficial transcript may reflect that expulsion was the result of academic dishonesty);
Suspension from the University for a specific period of time (the student's official and unofficial transcript may reflect that suspension was the result of academic dishonesty);
Other sanctions as consistent with this policy and the Student Code of Conduct.

- Final Sanctions

The student will receive written notice of the decision and recommendations of the Dean or Director.

If the sanctions do not include suspension from the university, expulsion from the university or revocation of the degree, the recommendations of the Dean or Director will be final.
If the sanctions include suspension from the university, expulsion from the university or revocation of the degree, but the student does not object in writing to the recommendations of the Dean or Director within 10 days, the recommendations of the Dean will be final.
If the sanctions include suspension from the university, expulsion from the university or revocation of the degree, and if the student provides written notice to the Provost of an objection to the recommendations of the Dean within 10 days, the Provost will convene a University Hearing Board to review the recommendations.

- Mitigating and aggravating circumstances may be considered in determining the appropriate sanction for a violation of this policy.

Guidelines for Review
18. A student may seek to have a Dean's or Director's decision reviewed by the University Hearing Board only if the final decision imposes a sanction of suspension or expulsion from the university, revocation of admission or revocation of a degree.
19. The request for review must be in writing and must be filed with the Provost within 10 days of the date of the decision letter from the Dean.
20. The University Hearing Board shall follow the procedures set forth in the ABOR Student Disciplinary Procedures, except that the Provost, or designee will take the role of the Vice President for Student Affairs and will establish the University Hearing Board to conduct the appeal, and the College may take the role of the Dean of Students in presenting the case on behalf of the College/Initiator. The Provost may make other alternations to the procedures, with notice to the individuals involved.
21. The University Hearing Board will make a recommendation to the Provost.
22. The decision of the Provost is final.

## Procedures Following Final Decision

If any student work affected by the finding of academic dishonesty has been placed in the library or forwarded to a third party in partial fulfillment of degree requirements that work may be removed from the library or withdrawn from the third party. If a degree has been awarded, it may be revoked if requirements were not adequately fulfilled due to academic dishonesty.

## Other University Policies

The University's Misconduct In Research Policy is independent of the Student Academic Integrity Policy and the Guidelines for Graduate Appeals. Individual conduct may, for example, violate both the Student Academic Integrity Policy and the Misconduct in Research Policy and be subject to review and sanctions under both policies.
Source URL: http://provost.asu.edu/academicintegrity/policy/Sanctions

## Definitions

Academic Evaluation: Means any academic project, paper, performance, quiz, exam, comprehensive exam, candidacy exam, thesis, dissertation, clinical or internship experience or other evaluation assigned or offered for credit (including extra or optional credit), intended to fulfill an academic requirement, or considered by the university to provide academic or research experience (such as a paid research position).
College/School Board: Means each College, School or Program hearing or standards board appointed by the academic Dean, Director or administrative equivalent to review allegations of academic dishonesty.
Dean: Means the person holding the position of college Dean, Director, or the administrative equivalent, or that person's designee. (This does not include a "Program Director" or "School Director" if the academic unit reports to a college level dean or director.
Plagiarism: Means using another's words, ideas, materials or work without properly acknowledging and documenting the source. Students are responsible for knowing the rules governing the use of another's work or materials and for acknowledging and documenting the source appropriately.
Provost: Means the Provost or another person designated by the senior academic officer of the campus at which the alleged academic dishonesty occurred.
University: Means ASU Tempe, ASU Polytechnic, ASU West, ASU Downtown Phoenix, ASU Online, and all other locations used for instruction or academic activities.
University Board: Means the University Academic Integrity Hearing Board constituted by the Provost at the campus at which the alleged academic dishonesty occurred.
Advisor: Means an individual selected by the student to assist him/her during a hearing conducted by the University Academic Integrity Hearing Board. The advisor may be a faculty or staff member, student, or other representative of the student.
Day: Means normal university business day, not including Saturday, Sunday or any officially recognized university employee holiday or any day on which the university is closed.
Source URL: http://provost.asu.edu/academicintegrity/policy/Definitions
The Grade of "XE"

## The Grade of "XE"

- The "XE" grade denotes failure through academic dishonesty. The "XE" grade will be recorded on the student's official and unofficial transcript with the notation "failure due to academic dishonesty." The "XE" grade shall be treated in the same way as an "E" for the purposes of grade point average and determination of academic standing.
- No student with an "XE" grade on his or her transcript shall be permitted to represent that University in any extracurricular activity or to run for or hold office in any recognized student organization.
- Generally, the "XE" grade will remain on the transcript permanently if it was awarded for an act of academic dishonesty requiring significant premeditation. For other cases, after at least 12 months have elapsed since the "XE" grade was imposed, a student may file a written petition to the Dean or Director of the College or Program that imposed the "XE" to have the "XE" grade removed and permanently replaced with the grade of "E." The decision to remove the "XE" grade and replace it with an "E" is in the sole discretion and judgment of the Dean or Director or his or her designee.
- The Dean or Director or designee may confer with other university officials and may require the student to attest that the student has not been involved in any other act of academic dishonesty or similar disciplinary offense at Arizona State University or another institution. If the student's representation is later discovered to be false, the "XE" grade may be reinstated.
Source URL: http://provost.asu.edu/academicintegrity/policy/TheGradeOfXE
Impact


## Following the Academic Integrity Policy and Avoiding Violations

Academic integrity is a fundamental value because violations of it cause real harm to real people. Protecting the ASU community from this harm is everyone's responsibility.

- Students who suspect a policy violation are encouraged to discuss their concerns with their course instructor or academic advisor.
- Faculty, T.A.'s, and instructors are expected to address all violations of the ASU Academic Integrity Policy. Please become familiar with the university policy and the process for addressing violations of the policy within your college/school.

Harm to Student
23. If students cheat in a course or another academic exercise, they are taking away from themselves the opportunity to learn.
24. The faculty holds the highest standards of academic integrity. If a student is caught cheating, the sanction can be anything from a lowered grade on an assignment to expulsion from ASU.
25. ASU has a grade of "XE" which can become part of a transcript and permanent academic records and explicitly means that the student failed a course because of academic dishonesty. Here's the Student Academic Integrity Policy's explanation of the "XE":

The "XE" grade denotes failure through academic dishonesty. The "XE" grade will be recorded on the student's official and unofficial transcript with the notation "failure due to academic dishonesty." The "XE" grade shall be treated in the same way as an "E" for the purposes of grade point average and determination of academic standing.
No student with an "XE" grade on his or her transcript shall be permitted to represent the University in any extracurricular activity or to run for or hold office in any recognized student organization.
Generally, the "XE" grade will remain on the transcript permanently.

- ASU degrees could mean less. If ASU develops a reputation for academic dishonesty based on high levels of student cheating, students' future employers, colleagues and others could have less respect for their accomplishments at ASU.
- Cheating creates an unfair grading environment for others. Whether or not a course is graded on a curve, a student who cheats, turns in high-quality work and is not caught raises the expectations about work quality for all students.
- Cheating can directly affect innocent students. For example, if a student plagiarizes on a group project, all the students in the group may be sanctioned for an Academic Integrity Policy violation.


## Harm to Future Employers, Clients or Patients

- Cheating can hurt the people students will work with in the future. Many students are preparing for careers where they will provide services to others-legal, journalistic, medical, research, etc. If these students fail to learn how to do this work because they cheat at ASU, they have cheated their future employers and clients of a knowledgeable professional.


## Harm to ASU

- ASU is an intellectual community focused on teaching, research and the values of the New American University. The creation, transmission, sharing and applying of knowledge are central activities of the community. Cheating violates fundamental values of the university community.
Source URL: http://provost.asu.edu/academicintegrity/impact
Published on ASU Academic Catalog (http://catalog.asu.edu)
University Policy for Student Appeal Procedures on Grades


## Informal

The steps outlined on this page, beginning with step A, must be followed by any student seeking to appeal a grade. Student grade appeals must be processed in the regular semester immediately following the issuance of the grade in dispute (by commencement for fall or spring), regardless of whether the student is enrolled at the university. It is university policy that students filing grievances and those who are witnesses are protected from retaliation. Students who believe they are victims of retaliation should immediately contact the dean of the college in which the course is offered.
A. The aggrieved student must first undergo the informal procedure of conferring with the instructor, stating the evidence, if any, and reasons for questioning that the grade received was not given in good faith. The instructor is obliged to review the matter, explain the grading procedure used, and show how the grade in question was determined. If the instructor is a graduate assistant and this interview does not resolve the difficulty, the student may then go to the faculty member in charge of the course (regular faculty member or director of the course sequence) with the problem.
B. If the grading dispute is not resolved in step A, the student may appeal to the department chair or other appropriate chair of the area within the department (if any). The department chair may confer with the instructor to handle the problem. Step B applies only in departmentalized colleges.
C. If these discussions are not adequate to settle the matter to the complainant's satisfaction, the student may then confer with the dean of the college concerned (or the dean-designate), who will review the case. If unresolved, the dean or designate may refer the case to the college academic grievance hearing committee to review the case formally. In most instances, however, the grievance procedure does not go beyond this level.

## Formal

The following procedure takes place after steps $A, B$, and $C$ (or $A$ and $C$ ) have been completed.
D. Each college has on file in the office of the dean (and in each department of the college) the procedures and composition of the undergraduate or graduate academic grievance hearing committee for student grievances. Each college committee shall operate under grievance procedures as stated, which satisfy due process requirements. The committee shall always meet with the student and the instructor in an attempt to resolve the differences. At the conclusion of the hearing, the committee shall send its recommendations to the dean.
E. Final action in each case will be taken by the dean after full consideration of the committee's recommendation. Grade changes, if any are recommended, may be made by the dean. The dean shall inform the student, instructor, department chair (if any), registrar, and grievance committee of any action taken.

Source URL: http://catalog.asu.edu/appeal

## University Undergraduate General Studies Requirement

A baccalaureate education should not only prepare students for a particular profession or advanced study, but for constructive and satisfying personal, social and civic lives as well. In addition to depth of knowledge in a particular academic or professional discipline, students should also be broadly educated and develop the general intellectual skills they need to continue learning throughout their lives. Thus, the General Studies requirement complements the undergraduate major by helping students gain mastery of critical learning skills, investigate the traditional branches of knowledge, and develop the broad perspective that frees one to appreciate diversity and change across time, culture, and national boundaries.

Critical learning skills include proficiency in the use of language, mathematics and quantitative methods as tools for acquiring, renewing, creating and communicating knowledge. A broad education includes an understanding of the methods and concerns of traditional branches of knowledge - the arts and humanities, the social sciences and the natural sciences. Developing perspective requires historical, global and cross-cultural examination of knowledge of all kinds.

The General Studies requirement is composed of courses in five core areas and three awareness areas. The courses are approved by the General Studies council and are noted in the Course Catalog [1] for each academic term. General Studies courses are regularly reviewed and are occasionally added to and deleted from the list. Students should always consult the Course Catalog [1] each semester to see which courses currently meet the General Studies requirement.

A student receives the General Studies credit that a course carries during the semester in which the course is taken.
Five Core Areas

## L: Literacy and Critical Inquiry (Six Credit Hours)

Literacy is competence in written and oral discourse. Critical inquiry is the gathering, interpretation, and evaluation of evidence. The literacy and critical inquiry requirement helps students sustain and extend their ability to reason critically and communicate clearly through language.
Students must complete six credit hours from courses designated as $L$, at least three credit hours of which must be chosen from approved upper-division courses, preferably in their major. Students must have completed ENG 101, 105, or 107 to take an L course.

## MA and CS: Mathematical Studies (Combined Six Credit Hours)

This core area has two categories: 1) mathematics (MA) is the acquisition of essential skill in basic mathematics and requires the student to complete a course in college mathematics or precalculus or to demonstrate a higher level of skill by completing a course
for which college algebra is a prerequisite, and 2) computer/statistics/quantitative applications (CS) applies mathematical reasoning and requires students to complete a course in either the use of statistics/quantitative analysis or the use of the computer to assist in serious analytical math work.
This requirement has two parts: 1) at least three credit hours must be selected from courses designated MA, and at least three credit hours must be selected from courses designated CS, and 2) all students are expected to fulfill the MA requirement by the time they accumulate 30 hours of credit in residence at ASU. Any student who has more than 30 hours of resident ASU credit and has not fulfilled the mathematics (MA) requirement must enroll in an MA course or an appropriate prerequisite and continue to do so every semester until the mathematics requirement is met. College officers may grant waivers to the immediate and continual enrollment requirement only when there are scheduling conflicts detrimental to the student's academic progress.

## HU: Humanities, Fine Arts, and Design and SB: Social and Behavioral Sciences (Combined 15 Credit Hours)

The study of the humanities and the disciplines of art and design deepen awareness of the complexities of the human condition and its diverse histories and cultures. Courses in the humanities are devoted to the productions of human thought and imagination, particularly in philosophical, historical, religious, and artistic traditions. Courses with an emphasis in fine arts and design are devoted to the study of aesthetic experiences and the processes of artistic creation. They may also feature a design emphasis in which material culture is studied as a product of human thought and imagination.
The social and behavioral sciences provide scientific methods of inquiry and empirical knowledge about human behavior, within society and individually. The forms of study may be cultural, economic, geographic, historical, linguistic, political, psychological or social. The courses in this area address the challenge of understanding the diverse natures of individuals and cultural groups who live together in a world of diminishing economic, linguistic, military, political and social distance.
A total of 15 credit hours must be completed in the following two core areas: 1) humanities, fine arts, and design (HU), and 2) social and behavioral sciences (SB). Two conditions must be satisfied: 1) six credit hours must be taken in one of these two core areas and nine hours in the other core area, and 2) three of the 15 credit hours must be at the upper-division level.

## SQ and SG: Natural Sciences (Combined Eight Credit Hours)

The natural sciences help students appreciate the scope and limitations of science and its contributions to society. Natural science areas of study include anthropology, astronomy, biology, biochemistry, chemistry, experimental psychology, geology, microbiology, physical geography, physics and plant biology. Knowledge of methods of the scientific inquiry and mastery of basic scientific principles and concepts are stressed, specifically those that relate to matter and energy in living and nonliving systems. First-hand exposure to scientific phenomena in the laboratory is important in developing and understanding the concepts, principles and vocabulary of science.
General Studies courses that satisfy the natural science requirement are given one of two classifications: quantitative (SQ) and general (SG).

- Natural Science-Quantitative (SQ): these laboratory courses include a substantial introduction to the fundamental behavior of matter and energy in physical and biological systems.
- Natural Science-General (SG): these laboratory courses cover aspects of scientific inquiry that lend themselves to more qualitative or descriptive discussions of science.
Eight credit hours of courses designated SQ or SG must be selected. Of these, at least four credit hours must be taken from the SQ category.
Three Awareness Areas
Students must complete courses that satisfy three awareness areas. Courses that are listed for a core area and one or more awareness areas may satisfy requirements concurrently, up to a maximum of two of the awareness area(s) listed for that course. These awareness areas promote appreciation of cultural diversity within the contemporary U.S., the development of an international perspective, and an understanding of current human events through study of the past.


## 1. Cultural Diversity in the United States (C)

The objective of the cultural diversity (C) requirement is to promote awareness and appreciation of cultural diversity within the contemporary U.S. This is accomplished through the study of the cultural, social, or scientific contributions of women and minority groups, examination of their experiences in the U.S., or exploration of successful or unsuccessful interactions between and among cultural groups. Awareness of cultural diversity and its multiple sources can illuminate the collective past, present and future and also help students to achieve greater mutual understanding and respect.

## 2. Global Awareness (G)

The objective of the global awareness (G) requirement is to help students recognize the need for an understanding of the values, elements, and social processes of cultures other than those of the U.S. The global awareness area includes courses that recognize other contemporary cultures and the relationship of the American cultural system to generic human goals and welfare.

## 3. Historical Awareness (H)

The objective of the historical awareness $(\mathrm{H})$ requirement is to help students develop knowledge of the past that can be useful in shaping the present and future. History is present in languages, art, music, literature, philosophy, religion and the natural sciences,
as well as in the social science traditionally called history.

## Meeting the General Studies Requirement

All students enrolled in a baccalaureate degree program must successfully complete a minimum of 35 credit hours of approved General Studies courses. Many General Studies courses are approved as satisfying more than one requirement. The following conditions govern the application of courses toward the General Studies requirement:
26. A single course may be used to satisfy one core area and a maximum of two awareness area requirements.
27. A single course may be used to satisfy a maximum of two awareness area requirements.
28. A single course cannot be used to satisfy two core area requirements, even if it is approved for more than one core area.

There is no limit to the number of advanced placement (AP) or College-Level Examination Program (CLEP) credits that can be used to meet the General Studies requirement; see Credit by Examination [2]. However, the natural sciences (SQ and SG) and literacy and critical inquiry (L) portions of the General Studies requirement are not satisfied by CLEP.

## Transfer Credit

The Arizona General Education Curriculum (AGEC), offered by Arizona community colleges, is composed of 35 credit hours of lowerdivision general education course work. Students who complete the AGEC have fulfilled the ASU First-year Composition requirement and all lower-division portions of the General Studies requirement. Students must still take six upper-division credit hours (three for L and three for SB or HU ) to complete the ASU General Studies requirement. If students transfer from Arizona community colleges without completing the AGEC or from other accredited postsecondary institutions, they receive credit for General Studies based on course-by-course equivalency. See Arizona General Education Curriculum [3].
College or School and Major Requirements
In addition to the General Studies requirement, students must also complete college or school and major requirements. Students are encouraged to work with their academic advisors to develop a program of study that efficiently meets all graduation requirements. A well-planned program should enable a student to concurrently satisfy requirements at the university, college or school levels and within their major.
Source URL: http://catalog.asu.edu/ug gsr
Links:[1] https://webapp.asu.edu/catalog/
[2] http://catalog.asu.edu/credit exam\#CLEP
[3] http://catalog.asu.edu/agec

## University Undergraduate Graduation Requirements

## All students enrolled in a baccalaureate degree program must fulfill the following university requirements to graduate.

## Credit Requirements

A minimum of 120 credit hours is required for graduation with a baccalaureate degree. A minimum of 45 credit hours in upperdivision courses is required for graduation. Some programs may require more than 120 credit hours and 45 upper-division credit hours for graduation; check the program's major map for graduation requirements.
No more than 60 credit hours in independent learning courses and/or earned by comprehensive examination (including advanced placement, College-Level Examination Program, DANTES Subject Standardized Test, and International Baccalaureate Diploma/Certificate exams) are accepted for credit toward the baccalaureate degree.

## Grade Point Requirement

A minimum cumulative grade point average of 2.00 for all courses taken at ASU is required to graduate with a baccalaureate degree. Some programs may require more than a 2.00; refer to the specific program's major map for graduation requirements.

## General Studies Requirement

All students enrolled in a baccalaureate degree program must satisfy a university requirement of a minimum of 35 credit hours of approved course work. See General Studies. [1]
Students transferring from Arizona community colleges with a certified completion of the appropriate Arizona General Education Curriculum (AGEC) will have satisfied all lower-division General Studies requirements of the baccalaureate degree with which the AGEC articulates. For more details regarding the different versions of AGEC, refer to http://aztransfer.com/ [2].
Mathematics Requirement
All undergraduate degree-seeking students are expected to fulfill the university's mathematics requirement by the time they have accumulated 30 hours of credit in residence at ASU. Any student who has more than 30 hours of credit and has not fulfilled the mathematics requirement must enroll in a mathematics course or an appropriate prerequisite course and continue to do so every semester until the mathematics requirement is met. A waiver may be granted for continuous enrollment if there are scheduling conflicts detrimental to the student's academic progress.
First-Year Composition Requirement
Completion of both ENG 101 and 102 or ENG 105 with a grade of " $C$ " (2.00) or higher is required for graduation from ASU in any
baccalaureate program. International students from non-English-speaking countries may meet the first-year composition requirement by completing ENG 107 and 108 with a grade of " $C$ " (2.00) or higher. Students who are required to take first-year composition must enroll in their first required composition course within the first year and continue to enroll in required composition courses every term until composition requirements are met.

## New and Transfer Students

Composition courses transferred from non-Arizona public or out-of-state institutions may require evaluation and approval by the Writing Programs Office. After consultation with an advisor, if evaluation is necessary, the student should provide a copy of the transfer transcript and catalog description of the course(s) to the Writing Programs Office in LL 314, 480/965-3853 on the Tempe campus or the Writing Programs Office in FABN 201A, 602/543-6091 on the West campus. Students should complete the process upon transfer of coursework to ASU so that the student is able to enroll in additional courses if required to do so. Students who are required to take first-year composition must enroll in their first required composition course within the first year and continue to enroll in required composition courses every term until composition requirements are met.

## Resident Credit Requirement

Resident credit refers to a course that is offered in a regular semester, winter session (prior to 2011-2012), intersession or summer session. Credit earned through comprehensive examinations is also included when calculating ASU resident hours. Credit earned through independent learning, advanced placement, the College-Level Examination Program or an International Baccalaureate Diploma/Certificate are excluded when calculating ASU resident hours.
Every candidate for the baccalaureate degree is required to earn a minimum of 30 credit hours in resident-credit courses at ASU. Guidelines for Determination of Catalog Year
The catalog is published annually. Department, school, division, college, and university requirements may change and are upgraded often. In determining graduation requirements, an undergraduate student may use only one edition of the catalog but may elect to follow any later catalog edition. Students may not use an edition of the catalog that was in effect before their high school graduation or completion of GED. Students maintaining continuous enrollment at any Arizona community college or public university may graduate according to the requirements of the catalog in effect at the time of initial enrollment following high school graduation or completion of a GED or according to the requirements of any single catalog in effect during subsequent terms of continuous enrollment. Students may maintain continuous enrollment whether attending a single Arizona community college or public university or transferring among public institutions in Arizona while pursuing their degrees. Students transferring among Arizona public higher education institutions must meet the admission, residency and all curricular and academic requirements of the degreegranting institution.

- A semester in which a student earns course credit is counted toward continuous enrollment. Noncredit courses, audited courses, failed courses, or courses from which the student withdraws do not count toward the determination of continuous enrollment for catalog purposes. See examples $A$ and $B$ in the Continuous Enrollment table below.
- Students who do not meet the minimum enrollment standard stipulated in number one during three consecutive semesters (fall/spring/fall or spring/fall/spring) and the intervening summer term at any Arizona community college or public university are no longer considered continuously enrolled. (Note that students are not obligated to enroll and earn course credit during summer terms, but summer enrollment may be used to maintain continuous enrollment status.) These students must meet requirements of the Arizona community college or public university catalog in effect at the time they are readmitted or of any single catalog in effect during subsequent terms of continuous enrollment after readmission. See examples $C$ and $D$ in the Continuous Enrollment table below.
- Students admitted or readmitted to an Arizona community college or public university during a summer term must follow the requirements of the catalog in effect the following fall semester or of any single catalog in effect during subsequent terms of continuous enrollment. See example E in the Continuous Enrollment table below.
- In areas of study in which the subject matter changes rapidly, material in courses taken long before graduation may become obsolete or irrelevant.
- Course work that is more than eight years old is applicable to completion of degree requirements at the discretion of the student's major department. Departments may accept such course work, reject it, or request that the student revalidate its substance. The eight-year limit on course work applies except when program accreditation agencies limit the life of course work to fewer than eight years. Departments may also require students to satisfy current major requirements rather than major requirements in earlier catalogs when completing earlier requirements is no longer possible or educationally sound.
- Enrollment by Arizona community college students in nontransferable courses still constitutes enrollment for purposes of determining whether the student has been continuously enrolled. For example, if a student takes two semesters of cooperative education classes that are not transferable to the university but constitute continuous enrollment at the community college, the university should consider it continuous enrollment.
- Exceptions made by an institution apply only to the institution that made the exception. For example, if the community college departments accepted credit that was more than eight years old, the university department to which the student transfers might not; it has the right and the obligation to reevaluate any credit more than eight years old.

Inquiries about these guidelines may be directed to the student's academic advisor.
Continuous Enrollment

| Student's Activity | Semester/Year | Status |
| :---: | :---: | :---: |
| Example A |  |  |
| Admitted and earned course credit at an Arizona community college | Fall 2001 | Active |
| Continued at an Arizona community college | Spring 2002 | Active |
|  | Fall 2002 |  |
| Transferred to an Arizona university | Spring 2003 | Student enrolled under 2001-2002 or any subsequent catalog |
| Example B |  |  |
| Admitted and earned course credit at an Arizona community college | Fall 2003 | Active |
| Enrolled but earned all "Ws" or "Es" (0.00) | Spring 2004 | Inactive |
| Enrolled in audit courses only | Fall 2004 | Inactive |
| Nonattendance | Spring 2005 | Inactive |
| Transferred to an Arizona university | Fall 2005 | Student enrolled under 2005-2006 or any subsequent catalog |
| Example C |  |  |
| Admitted and earned course credit at an Arizona community college | Fall 1999 | Active |
| Nonattendance | Spring 2000 | Inactive |
|  | Fall 2000 |  |
|  | Spring 2001 |  |
| Readmitted and earned course credit at an Arizona community college | Fall 2001 | Active |
| Transferred to an Arizona university | Spring 2002 | Student enrolled under 2001-2002 or any subsequent catalog |
| Example D |  |  |
| Admitted and earned course credit at an Arizona community college | Fall 2000 | Active |
| Nonattendance | Spring 2001 | Inactive |
| Readmitted and earned course credit at an Arizona community college | Summer 2001 | Active |
| Nonattendance | Fall 2001 | Inactive |
|  | Spring 2002 |  |
| Transferred to an Arizona university | Fall 2002 | Student enrolled under 2000-2001 or any subsequent catalog |
| Example E |  |  |
| Admitted and earned course credit at an Arizona community college | Summer 2004 | Active |
| Continued at an Arizona community college | Fall 2004 | Active |
|  | Spring 2005 |  |
| Nonattendance | Fall 2005 | Inactive |
| Readmitted and earned course credit at an Arizona community college | Spring 2006 | Active |
| Transferred to an Arizona university | Summer 2006 | Student enrolled under 2004-2005 or any subsequent catalog |
| Example F |  |  |
| Admitted and earned course credit at an Arizona university | Summer 2004 | Active |


| Nonattendance | Fall 2004 | Inactive |
| :--- | :--- | :--- |
| Nonattendance | Spring 2004 | Inactive |
| Readmitted and earned course credit at an Arizona <br> university <br> Continued at an Arizona community college | Fall 2005 | Active |
|  | Spring 2006 | Student enrolled under 2004-2005 or any <br> subsequent catalog |

## Application for Graduation

For information on how to apply for graduation and deadline dates visit: http://students.asu.edu/graduation [3].

## Petition for Variance from Degree

Any student wishing to have a college or university degree requirement variance must petition the standards committee of the college in which the student is enrolled. All petitions must originate with the student's advisor.
The University Undergraduate Standards Committee advises the Office of the Executive Vice President and Provost of the University regarding undergraduate student petitions that concern university-wide academic requirements. These requirements include but are not limited to requirements on the amount of transfer credit, graduation requirements, limits on credit by examination and requirements for a second baccalaureate degree. To petition for a variance from such university requirements, the University Undergraduate Standards Committee Petition is used. Most petitions heard by the University Undergraduate Standards Committee start at the college level and are forwarded for final review and decision to the university level committee.

## Overview of Graduation Requirements

At ASU, students take classes that fulfill four types of requirements. As illustrated in the Graduation Requirements diagram below, some courses can fulfill two or more types of requirements, but other courses fulfill only one requirement. The total credit hours needed to graduate are represented by the largest circle. The university minimum is 120 credit hours. Some majors, however, require more than 120 credit hours.
Although the three shaded circles are equal in size and the white circle is larger than all three, the total number of semester hours for each type of requirement may vary.


## University Requirements

The yellow circle represents university requirements. The General Studies requirement and the First-year Composition requirement are among these requirements.

## College Requirements

The gray circle represents college requirements. Some colleges and schools have additional requirements, such as the College of Liberal Arts and Sciences.

## Major

The red circle represents the requirements of the major. The credit hours required for a major may be as low as 30 hours or as high as 63 hours.

## Electives/Minor/Certificate

The white circle represents electives and the requirements of a minor or certificate. A minor typically adds an additional 18 to 25 credit hours of course work. Although every student must eventually declare a major, minor and certificates are not required. Some courses, while providing credit hours toward graduation, fall outside the shaded circles and are not required in a program for graduation. These courses are electives. Some majors leave no room for electives within the minimum 120 credit hours required to graduate.

## Other Requirements

The separate units of ASU - such as colleges, schools and departments - have specific requirements for graduation that must be satisfied for a baccalaureate degree. Students are encouraged to consult with an academic advisor in planning a program to ensure that it meets the various requirements. A well-planned program may enable a student to concurrently satisfy a portion of the General Studies requirement together with a portion of a college or major requirement.

## Graduation with Academic Recognition

An undergraduate student must have completed at least 56 credit hours of resident credit at ASU to qualify for graduation with academic recognition for a baccalaureate degree. Note: West campus students following a catalog year prior to fall 2007 are required to have completed at least 50 credit hours of resident credit at ASU.
The cumulative GPA determines the designation, as shown in the Academic Recognition table below.
Academic Recognition

| Cumulative GPA | Designation |
| :--- | :--- |
| $3.40-3.59$ | cum laude |
| $3.60-3.79$ | magna cum laude |
| $3.80-4.00$ | summa cum laude |

The cumulative GPA for these designations is based on only ASU resident course work. For example, ASU independent learning course grades are not calculated in the honors GPA. All designations of graduation with academic recognition are indicated on the diploma and the ASU transcript. Graduation with academic recognition applies only to undergraduate degrees.
A student who has a baccalaureate degree from ASU and is pursuing a second baccalaureate degree at ASU (with a minimum of 30 hours of resident credit) is granted academic recognition on the second degree based on the credit hours earned subsequent to the posting of the first degree. If fewer than 56 credit hours are completed at ASU subsequent to completion of the first ASU degree, the level of academic recognition can be no higher than that obtained on the first degree. If 56 or more credit hours are completed at ASU after completion of the first ASU degree, the level of academic recognition is based on the GPA earned for the second ASU degree. Inquiries about graduation with academic recognition may be directed to the Graduation Section, 480-965-3256.

## Additional Degrees

## Second Baccalaureate Degree

The student seeking a second baccalaureate degree must meet admission criteria for that degree. After conferral of the first degree, a minimum of 30 credit hours in resident credit courses at ASU must be successfully completed to earn the second baccalaureate degree. The student must meet all degree and university requirements of the second degree.

## Concurrent Degrees

More than one baccalaureate degree may be pursued concurrently if prior approval is given by the standards committee(s) of the college(s) offering the degrees. Students may receive concurrent degrees if they meet the minimum requirements for both degrees.
eAdvisor and Critical Requirements
eAdvisor is Arizona State University's electronic advising and enrollment management system designed for first-time freshmen and transfer students from Arizona public universities and Arizona community colleges. eAdvisor assists students in
29. learning more about graduation requirements for their major.
30. Discerning what critical courses and grades are required to stay on track to successfully complete their degree.
31. Planning for and scheduling appropriate courses in the correct sequence to maximize success.
32. Monitoring progress toward their degree.
33. Finding out how courses may fit into other majors if they decide to change majors.

Through eAdvisor, students follow a major map that outlines the critical rquirements and optimal eight semester plan. If students to not meet the critical requirements, an advising hold may be placed on the students' records and an advising session is required before future registration activities. When students do not meet the critical requirements for two consecutive semesters, they are considered off-track, and may be advised to change majors.
Source URL: http://catalog.asu.edu/ug grad req
Links:[1] http://catalog.asu.edu/ug_gsr
[2] http://aztransfer.com/
[3] http://students.asu.edu/graduation

# graduate policies and <br> procedures 

1? GRADUATE College
Arizona State University Graduate Policies and Procedures*
ARIZONA STATE UNIVERSITY
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*Effective 11/17/2010. Consult online version of Graduate Policies for the most current information: graduate.asu.edu/academic_policies.html

## Introduction

The Graduate College admits students into programs leading to both professional and research-oriented advanced degrees beyond the bachelor's degree. The master's and doctoral degrees are awarded to students completing programs that culminate in research and creative endeavors. The Ph.D. degree is the highest university award, conferred on candidates who have proven their ability as scholars and original researchers.

## Academic Integrity

The highest standards of academic integrity and compliance with the university's Student Code of Conduct are expected of all graduate students in academic coursework and research activities. University policies related to academic integrity and code of conduct are available in the Office of Student Life. The failure of any graduate student to uphold these standards may result in serious consequences including suspension or expulsion from the university and/or other sanctions as specified in the academic integrity policies of individual colleges as well as the university.

Violations of academic integrity include, but are not limited to: cheating, fabrication, tampering, plagiarism, or aiding and/or facilitating such activities. At the graduate level, it is expected that students are familiar with these issues and that each student assumes personal responsibility in their work. The Graduate College highly recommends that assignments, research papers, theses and dissertations be run through Safe Assignment.

## Graduate Student Responsibilities

Graduate students are responsible for familiarizing themselves with all graduate policies and procedures. Each student should also communicate directly with their academic unit to be clear on its expectations for degree completion.

Information is provided to students via MyASU. Students should frequently check their MyASU account for the most up-to-date information regarding their status, holds, items to attend to and other information.

It is very important that students check with their thesis/dissertation advisor well in advance of data collection to ensure compliance with university regulations regarding the collection of research data. Please see the section of this guide titled "Research Involving Human and Animal Subjects."

## Application

## Submission of an Application

For admission information and procedures, see graduate.asu.edu/admissions. Applications for all graduate degree programs, certificate programs, and/or non-degree must be submitted via the application website.

Prior to submitting an application to the Graduate College, applicants should review information regarding the degree program, and academic unit application requirements and deadlines. Students who have an approved leave of absence on file with the Graduate College prior to their departure and are re-entering the same degree program for the semester immediately following the approved leave, are not required to submit a new application.

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## Application Deadlines

Application deadlines are set by the degree programs. Consult the program's website or the Graduate Degree \& Certificate Search tool for specific application deadlines.

Graduate College application deadlines may differ from those of the academic unit. To accommodate timely processing, international applicants for fall enrollment must submit application materials by the previous December. Not all academic units accept applications for both the fall and spring semesters; however, if the academic unit allows for spring applications, international applicants must submit materials for spring enrollment by the previous August.

Graduate College Application Deadlines:

| Application Term | Fall | Winter | Spring | Summer |
| :--- | :--- | :--- | :--- | :--- |
| Degree/Certificate | July 1 | No applications | December 1 | May 21 |
| Non-Degree | August 1 | December 15 | January 1 | May 21 |

## Application Fee

Each application to an ASU graduate program must be accompanied by a nonrefundable application fee, payable by credit card at the time of submission. The application fee is devoted to the Graduate College administrative cost of processing all applications and is not refundable under any circumstance.

人 Domestic application fee: \$70;
人 International application fee $\$ 90$.

In addition to the normal application fee, a $\$ 50$ non-refundable late processing fee will be assessed for all applications submitted on or after the dates indicated previously.

Applicants receive an email acknowledgement once the application has been successfully submitted. The acknowledgement includes an ASURITE ID and activation code so that they may follow the progress of their application through MyASU.

## Application Requirements

Applicants must submit official transcripts from all post-secondary institutions previously attended to the Graduate College (see graduate.asu.edu/admissions). Academic units may have admission requirements in addition to those of the Graduate College. Many graduate programs require scores from a national admissions test such as the Graduate Record Examination (GRE), Graduate Management Admission Test (GMAT), or the Miller Analogies Test. Some programs require a portfolio, letters of recommendation, a statement of goals and/or a resume.

All documents received by the Graduate College in connection with an application become property of the ASU Graduate College and will not be returned.

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## Academic Credentials

Applicants who attended school in the United States must hold a bachelor's degree from a regionally accredited U.S. institution in order to be eligible for admission. Applicants are required to provide proof that a bachelor's degree was awarded before completion of their first semester of graduate studies at ASU.

Applicants who attended school outside of the U.S. must hold a bachelor's degree, or equivalent, from an institution that is officially recognized by that country. If original credentials are issued in a language other than English, applicants must provide the original language transcripts as well as an official and literal translation. Applicants are required to provide proof that a bachelor's degree was awarded before completion of their first semester of graduate studies at ASU.

Photocopied documents certified by a notary public are not official. For more information regarding official academic credentials see http://graduate.asu.edu/admissions/degree requirements. For additional information regarding official international academic credentials see
http://graduate.asu.edu/admissions/international/official academic credentials.

Applicants must have maintained a minimum grade point average of 3.0 (on a 4.0 scale) in the last 60 semester hours or 90 quarter hours of undergraduate coursework.

Applicants should contact the degree program for specific additional requirements. Degree programs will submit a recommendation to the Graduate College Dean regarding their willingness to admit an applicant.

Because ASU receives applications from many highly qualified students, some applicants may be denied admission for reasons not related to their academic performance. Examples include, but are not limited to: program capacity, mentor availability, and/or program match.

## Additional International Requirements

## International Applicants

Please consult the Graduate College websites at http://graduate.asu.edu/admissions/international, and http://graduate.asu.edu/admissions/international/visa immigration for complete information.

Applicants who will hold an F-1 or J-1 visa must:

1. Meet the regulations of the U.S. Immigration and Customs Enforcement (ICE) agency.
2. Obtain insurance coverage against illness and accident before being permitted to register for classes. Insurance must be maintained throughout the student's enrollment at the university.
3. Submit proof of English proficiency.
4. Submit additional materials as outlined on the Graduate College's website at graduate.asu.edu/admissions.
5. Verify that they have the financial resources to cover their expenses during graduate study at ASU. The Financial Guarantee form is available through the Graduate College website at graduate.asu.edu/forms. In addition to the Financial Guarantee form, if ASU is providing an assistantship, an official offer letter must be sent to the Graduate College. Similarly, if a governmental

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entity is funding the student，an official letter from the government must be submitted to the Graduate College in addition to the Financial Guarantee form．

The I－20 or the DS－2019（documents needed to obtain a student visa）is issued only after the completed and properly verified Financial Guarantee form，proof of English proficiency and supporting documents have been received by the Graduate College．International students may enroll at ASU only if they have been admitted to a degree program，a certificate program，or the post－baccalaureate teacher education program．Immediately upon arrival on campus，students must report to an advisor in the International Student and Scholars Office （ISSO）．Failure to report may result in loss of status or deportation．

Applicants residing in the U．S．on a valid visa must provide proof of a current visa．Enlarge image and fax the copy to（480）965－5158．

## English Language Requirement

Applicants from a country whose native language is not English must provide proof of English proficiency． Acceptable proof is as follows：

人 TOEFL score of at least 550 （PBT）or 80 （iBT）．The TOEFL is administered by TOEFL／TSE Services．ASU＇s institutional code is 4007．ASU accepts only electronic copies of the TOEFL score report．

人 IELTS overall band score of at least 6.5 with no band below 6．0．The IELTS is administered by the University of Cambridge．No institutional code is needed．
$\lambda$ Pearson Test of English（PTE）score of at least 60．The PTE is administered by Pearson．

Individual academic units may have higher requirements for English proficiency．Consult the academic unit＇s website．English proficiency is only valid for two years and must be taken within two years from the beginning of the semester for which the student applied．

Some applicants are exempt from the English proficiency requirement．The following exceptions must be met exactly to be considered for an exemption：

人 Applicants who have earned a bachelor＇s degree or higher from a regionally accredited college／university in the United States．

人 Applicants who have completed at least 12 semester hours of graduate coursework with a cumulative GPA of 3.0 （on a 4.0 scale）or higher at a regionally accredited university in the United States．

人 Applicants who have completed at least 90 semester hours of undergraduate coursework with a cumulative GPA of 3.0 （on a 4.0 scale）or higher at a regionally accredited college／university in the United States．

人 Applicants who have completed the American English and Culture Program（AECP）Advanced Level II with grades of $B$ or better along with the recommendation of the Director of AECP．

All international applicants who are from a country whose native language is not English and who wish to apply for teaching assistantships must pass an examination that certifies their skill in speaking English—either the Interview Test，or the Speaking Proficiency English Assessment Kit（SPEAK）test．Tests are administered at ASU； additional information may be found at http：／／global．asu．edu／aecp／ita．

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## Post-Baccalaureate Non-Degree Programs

Applicants who do not immediately intend to pursue a graduate degree may apply as a post-baccalaureate nondegree student. The application process does not require the submission of academic credentials or test scores unless applying to a graduate certificate program.

Non-degree applicants must have earned a bachelor's degree from a U.S. regionally accredited institution or the equivalent of a U.S. bachelor's degree from an international institution that is officially recognized by that country.

There is no limit to the total cumulative credit hours a student can take as a non-degree student. However, to apply the credit hours toward an ASU master's or doctoral degree, students are limited to nine credit hours taken within three years of admission to a master's degree program and twelve credit hours prior to admission to a doctoral degree.

Non-degree study may be restricted by certain academic units. Contact the degree program for restriction information.

Financial aid is not available to non-degree students.
Non-degree study is typically not available to international students on F-1 or J-1 visas. For exceptions, prior to applying, you must obtain written approval from your Designated School Official granting permission for you to take classes.

## After Applying

After an application has been successfully submitted, applicants receive an email acknowledgement that includes an ASURITE ID and activation code. Applicants should review MyASU to check on the application status, "To Do" items and "Holds". For additional information see http://graduate.asu.edu/admissions/after you apply.

## Admission

A minimum grade point average of 3.0 (on a 4.0 scale) in the last 60 semester hours or 90 quarter hours of undergraduate coursework is required to be considered for admission to an ASU graduate degree program.

Academic units submit recommendations regarding admission decisions to the Graduate College; only the Dean of the Graduate College can make formal offers of admission.

Applicants may check the status of their application through MyASU. If admitted, the formal letter of admission can be downloaded from MyASU. If denied admission, letters are sent to the email address on record.

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## Admission Types

人 Regular Admission：Applicant satisfies all requirements for admission and is academically acceptable to both the degree program and the Graduate College．

人 Regular Admission with Deficiencies：Applicant＇s grades and test scores are at an acceptable level but applicant does not have the academic background expected by the degree program and the university． Required deficiency courses may not be applied toward the minimum hours required for the degree program．Monitoring deficiency completion is the responsibility of the academic unit．

人 Provisional Admission：Applicant does not meet minimum academic standards with respect to grade point averages as required by the Graduate College and the academic unit，but has additional evidence to suggest the potential for success．This status provides the academic unit with an opportunity to better evaluate the student＇s academic potential．Students have a maximum of one academic year to satisfy the provisional condition．The Graduate College will withdraw students from the degree program who have not meet the provisions of their admission within the required timeframe．When students have satisfied the provisional requirements，they should confirm with the academic unit that a change of status has been recommended．Students with Provisional Admission are not eligible to submit a Plan of Study．

## Defer Admission

Students may，with the recommendation of the degree program，defer their initial semester and year of admission to the next semester for which the degree program is admitting students．No further deferrals are allowed．

## International Student Admission

International students planning to attend ASU on an F－1 student visa or a J－1 exchange visitor visa must provide documentation required by the United States Citizenship and Immigration Services．Visa documents are only issued for international students enrolled in a degree program or the post baccalaureate teacher education program．There are strict regulations regarding when an I－20 or DS－2019 can be issued．Detailed information may be found at：http：／／graduate．asu．edu／admissions／international／visa immigration

## Registration and Enrollment

All students are required to have proof of measles immunizations on file with Student Health prior to registration．

Graduate students register through MyASU according to their enrollment appointment．Details regarding registration and course drop／add procedures are provided in the Registration and Tuition Payment Guide．

## Enrollment Verification Guidelines

The university＇s Registrar＇s Office will verify student enrollment each semester according to the general guidelines that follow．

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Enrollment Verification Guidelines for Graduate Students

| Full Time＊ |  |  | Half Time | Less Than Half Time |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Regular Semester |  |  |  |  |
| Graduate | 9 or more hours | $5-8$ hours | 4 or fewer hours |  |
| Graduate Assistant＊＊ | 6 or more hours | -- | -- |  |
| Five－Week Summer Session |  |  |  |  |
| Graduate | 3 or more hours | 2 hours | 1 hour |  |
| Graduate Assistant＊＊ | 2 or more hours | 1 hour | -- |  |
| Eight－Week Summer Session |  |  |  |  |
| Graduate | 5 or more hours | $3-4$ hours | 2 or fewer hours |  |
|  |  |  |  |  |

＊Audited courses do not count toward full－time enrollment
＊＊For enrollment verification purposes，＂Graduate Assistant＂is a generic term that includes Teaching Assistants， Research Assistants，Teaching Associates and Research Associates．Academic units may have specific requirements regarding registration requirements for Graduate Assistants；students should consult with their degree program unit．

International F－1 and J－1 students are required to maintain full－time enrollment status．Any exception to full－ time enrollment must be previously approved by the International Student and Scholars Office（ISSO）．

## Maximum Course Load

The Graduate College does not have a maximum credit hour enrollment policy．It is expected that academic advisors will set course loads for their students that facilitate academic success．

## Continuous Enrollment

Once admitted to a graduate degree program or graduate certificate program，students must be registered for a minimum of one credit hour during all phases of their graduate education，including the term in which they graduate．This includes periods when students are engaged in research，working on or defending theses or dissertations，taking comprehensive examinations，taking Graduate Foreign Language examinations，or in any other way utilizing university resources，facilities or faculty time．

Registration for every fall semester and spring semester is required．Summer or winter registration is required for students taking examinations，completing culminating experiences，defending theses or dissertations，or graduating from the degree program．

To maintain continuous enrollment the credit hour（s）must：
人 Appear on the student＇s Plan of Study，OR
人 Be research（592，792），thesis（599），dissertation（799），or continuing registration（595，695，795），OR
人 Be a graduate－level course．

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Grades of "W" and/or " $X$ " are not considered valid registration for continuous enrollment purposes. "W" grades are received when students officially withdraw from a course after the drop/add period. " $X$ " grades are received for audit courses. Additionally, students completing work for a course in which they received a grade of " 1 " must maintain continuous enrollment as defined previously. Graduate students have one year to complete work for an incomplete grade; if the work is not complete and the grade changed within one year, the " 1 " grade becomes permanent. Additional information regarding incomplete grades can be found at http://www.asu.edu/aad/manuals/ssm/ssm203-09.html.

## Graduate Assistantships

All Graduate Teaching Assistants and Associates (TAs), and Graduate Research Assistants and Associates (RAs) must register for a minimum of six semester hours of appropriate credit during each academic term of their appointment. The six hours cannot include audit enrollment. Academic units may have specific requirements regarding Graduate Assistants; students should consult with their degree program unit.

TAs and RAs are treated as residents for tuition purposes. To be eligible for tuition remission, TAs and RAs must be employed a minimum of 10 hours per week ( 25 percent Full Time Equivalency \{FTE\}). TAs/RAs working 10-19 hours per week ( $25-49$ percent FTE) receive a 50 percent remission of tuition for the semester or summer session of their employment. TAs/RAs working 20 hours per week ( 50 percent FTE) do not pay tuition during the semester or summer session of their employment. In addition, the university pays the individual health insurance premium for those TAs and RAs working 20 hours per week ( 50 percent FTE).

Due to federal regulations, international students on F-1 and J-1 visas are allowed to work a maximum of 20 hours per week while school is in session (fall and spring semesters). International students are allowed to work 40 hours per week during summer sessions.

Detailed information and application procedures regarding Graduate Assistantships can be found at http://graduate.asu.edu/financing/tara.

## Leave of Absence

Graduate students planning to discontinue enrollment for a semester or more must request approval for a leave of absence; this request must be filed and approved before the anticipated absence. Students may petition the Graduate College for a leave of absence for a maximum of two semesters during their entire program. A petition for a leave of absence, endorsed by the members of the student's supervisory committee and the head of the academic unit, must be approved by the Graduate College Dean prior to the semester of the leave request.

An approved leave of absence will enable students to re-enter their program without re-applying to the university. Students who do not enroll for a fall or spring semester without an approved leave of absence by the Graduate College are considered withdrawn from the university under the assumption that they have decided to discontinue their program. Students removed for this reason may reapply for admission to resume their degree program; the application will be considered along with all other new applications to the degree program.

A student on leave is not required to pay fees, but in turn is not permitted to place any demands on university faculty or use any university resources.

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## Voluntary Withdrawal from ASU

If a student wishes to withdraw from all graduate degree programs and the university, they must complete the Voluntary Withdrawal form. Students must still complete the appropriate forms with the University Registrar to withdraw from their courses. International students should contact the International Student and Scholars Office (ISSO) before submitting a Voluntary Withdrawal form, as it most likely will affect their visa status.

## Voluntary Withdrawal from a Graduate Degree Program

If a student wishes to transition from one graduate degree program to another graduate degree program, the student should complete the Voluntary Withdrawal form. The students should not take this action until they have been admitted to the other graduate degree program.

## Other Types of Withdrawal

There are appropriate circumstances when students may need to withdraw from the university (i.e. medical withdrawal, compassionate leave). The policies for such withdrawals are the same for both undergraduate and graduate students. Types of withdrawals and procedures can be found at: http://students.asu.edu/withdrawal. For course withdrawals contact the University Registrar's Office.

## Involuntary Withdrawal by the Graduate College

Any student who does not comply with the Graduate College policies may be withdrawn from their graduate program after review by the Graduate College Dean.

In addition, an academic unit may recommend withdrawal of a student from a graduate program for lack of compliance with published departmental policies or lack of satisfactory academic progress. All such recommendations must be submitted to the Graduate College, documenting the issue, communication with the student, and the failure of the student to remedy the issue. Only the Graduate College Dean may withdraw a student from a graduate program due to lack of compliance with satisfactory academic progress policies.

## Academic Progress

## Grade Point Averages

Graduate students must maintain a minimum 3.00 grade point average (GPA) to maintain satisfactory academic progress and to graduate. The minimum 3.00 GPA must be maintained on both the Plan of Study (iPOS) GPA and the Graduate GPA.

人 The iPOS GPA is calculated on all courses that appear on the student's approved iPOS.
人 The Graduate GPA is calculated on all courses numbered 500 or higher that appear on the transcript, with the exception of:
o Courses counted toward an undergraduate degree at ASU (unless shared with a master's degree in an approved bachelor's/master's degree program);
o Courses identified as deficiencies in the original letter of admission.

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Transfer credits and courses taken in the Sandra Day O'Connor College of Law are not calculated on the iPOS GPA or the Graduate GPA.

Courses with grades of "D" (1.00) and "E" (0.00) cannot appear on the iPOS but will be included when calculating the Graduate GPA. Courses with an "I" grade cannot appear on the iPOS.

## Satisfactory Academic Progress

All graduate students are expected to make systematic progress toward completion of their degree. This progress includes satisfying the conditions listed below, and achieving the benchmarks and requirements set by the individual degree programs. Each degree program should have in place policies for satisfactory academic progress. Students are responsible for verifying additional satisfactory progress policies as required by their degree program. If a student fails to satisfy the requirements of their degree program and/or the benchmarks outlined below, the student may be withdrawn from their program based on the academic unit's recommendation to the Graduate College. The Graduate College Dean makes the final determination.

1. Maintain a minimum of 3.00 GPA on both the iPOS and Graduate GPAs. If either GPA falls below 3.00, the student must develop, with their advisor, an academic performance improvement plan that includes the conditions and timeframes for making satisfactory academic progress in their degree program.
2. The student is considered to be on academic probation until the conditions specified in the academic performance improvement plan are met and both GPAs are above 3.00.
3. Satisfy all requirements of the graduate degree program.
4. Satisfy the maximum time limit for graduation from the student's graduate degree program (six years for master's, ten years for doctoral).
5. Doctoral students must comply with the five year time limit for graduation after passing the comprehensive examinations.
6. Successfully pass comprehensive exams, qualifying exams, foreign language exams, and the oral defense of the proposal/prospectus for the thesis or dissertation.
7. Successfully complete the culminating experience and, if required, the oral defense of the culminating experience.
8. Graduate students must remain continuously enrolled in their degree program. Failing to do so without an approved leave of absence is considered to be lack of academic progress and may lead to automatic withdrawal of the student from the degree program.

## Graduate Deqree Requirements

## Determination of Academic Requirements

Students graduate under the degree requirements and policies in effect at the semester and year of admission to a graduate degree program. Students that fail to maintain continuous enrollment and are re-admitted to the degree program, graduate under the degree requirements and policies in effect at the time of the new admission date.

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A minimum of 30 credit hours of graduate-level coursework including a culminating experience is required for a master's degree, although individual programs may have higher requirements. The culminating experience may be a comprehensive examination, a capstone course, an applied project, a portfolio, or a thesis or equivalent.

A minimum of 84 credit hours of graduate-level coursework and a written comprehensive examination are required for a doctoral degree, although individual programs may have higher requirements. Additionally, the Foreign Language Examination, oral comprehensive examination and/or dissertation or equivalent may be required.

## The Plan of Study (iPOS)

The Plan of Study (iPOS) functions as a contract between the student, the academic unit, and the Graduate College. The iPOS contains certain degree requirements such as coursework and a culminating experience which must be included before it can be approved. The academic unit's graduate support staff should be the primary contact regarding iPOS and degree requirements. The iPOS must be approved by a student's committee, the head of the academic unit, and the Graduate College Dean.

To facilitate degree completion and shorten time to degree, graduate students with regular status must submit their iPOS by the time they have enrolled for 50 percent of the minimum credit hours required for their degree program.

## Coursework

Graduate-level courses are those numbered 500 or higher. All core courses required by a graduate program must be at least 500 -level. A maximum of 6 credit hours of 400 -level coursework can be included on an iPOS. $400-$ level courses taken prior to admission and 400-level courses graded as "Pass/Fail" are not acceptable. Courses with grades of " $D$ ", " $E$ ", or "W" and audited courses (graded as "X") cannot be included on an iPOS. Courses applied to a previously awarded degree cannot be included on an iPOS.

Any course with a grade of Incomplete (" 1 ") must be completed within one calendar year of the end of the scheduled course. If a regular grade is not assigned within the calendar year, the " $I$ " becomes permanent. The student will have to re-register for the course to receive credit. Additional information regarding incomplete grades may be found at http://www.asu.edu/aad/manuals/ssm/ssm203-09.html.

Graduate students may register to audit one or more courses with the approval of the supervisory committee chair and the consent of the instructor involved. An audited course does not count toward the minimum number of credits required for international students with visa restrictions, students employed as TA/RAs, or students receiving financial assistance. Courses taken for audit do not satisfy the Graduate College continuous enrollment policy.

Master's degree students whose culminating experience is a thesis must include 6 (and only 6) credit hours of 599 Thesis credits on the iPOS. Doctoral students whose culminating experience is a dissertation must include 12 (and only 12) credit hours of 799 Dissertation credits on the iPOS. Thesis and Dissertation credit hours may only receive grades of " $Z$ " (research is in progress), or " $Y$ " (research is satisfactorily complete). Doctoral students may apply 30 credit hours from a previously awarded Master's degree toward their doctoral plan of study.

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## Petitions

A formal request for an exception to Graduate College policy requires a petition to be completed by the student, and approved by the committee chair and the head of the academic unit. The Graduate College will review the petition and make a final determination.

## Pre-Admission/Transfer Credit

## Pre-Admission Credits

Credit hours completed before the semester and year of admission to an ASU graduate degree program are considered pre-admission credits. With approval of the degree program and the Graduate College, a maximum of 9 credit hours of pre-admission credits may be included on the iPOS for a master's degree and a maximum of 12 credit hours for a doctoral degree provided the credits have not been used in a previously awarded degree program. Only pre-admission credits earned in graduate-level courses with a grade of " B " ( 3.00 ) or higher taken within three years of admission may be used toward a graduate degree. Pre-admission credits must be from a regionally accredited U.S. institution or an international institution officially recognized by that country. If the pre-admission courses were taken at an institution other than ASU, official transcripts must be provided to Graduate Enrollment Services.

## Graduate Credits Earned by Undergraduate Students

Pre-admission credit hours earned in graduate-level courses (per Graduate College policy) by undergraduate students may count toward their graduate degree at ASU provided the credit hours have not been used toward a previously awarded degree. Prior to awarding a bachelor's degree, ASU undergraduate students should contact their undergraduate advisor to set aside graduate courses for use toward a future graduate degree so that these courses do not count toward their undergraduate degree.

ASU students enrolled in an approved Bachelor's/Master's degree program (commonly referred to as $4+1$ ), may share ASU credit hours. Students must contact their ASU undergraduate advisor and graduate support staff to ensure proper sharing of credit hours.

An undergraduate degree and a graduate degree may not be awarded during the same term of enrollment. Students must be admitted and enrolled as a graduate student to earn a master's or doctoral degree at ASU.

## Non-ASU Transfer Credits

Transfer credits are those accepted from another institution for inclusion on an ASU Plan of Study. Transfer credits must be from a regionally accredited U.S. institution or an international institution officially recognized by that country. Official transcripts must be sent to Graduate Enrollment Services from the records office of the institution where the credits were earned.

Transfer hours may not exceed 20 percent of the total credit hours for a master's degree, and 12 credit hours for doctoral degrees. Only graduate-level courses with grades of "A" (4.00) or "B" (3.00) taken within three years of admission to the ASU graduate degree program may be transferred. Transfer credits may not be applied toward the minimum degree requirements for an ASU degree if they have been used for a previously-awarded degree.

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Certain types of graduate credits cannot be transferred to ASU，including credits awarded：
人 By post－secondary institutions that lack candidate status or accreditation by a regional accrediting association，or an equivalent international institution．

人 For life experience．
人 For courses taken at non－collegiate institutions（e．g．，government agencies，corporations，and industrial firms）．

人 For courses，workshops，and seminars offered by other postsecondary institutions as part of continuing education programs．
人 For extension courses．
Academic credits earned at institutions other than ASU that base their credit calculation on a different scale from ASU＇s are subject to conversion before inclusion on a Plan of Study．In all cases，the inclusion of transfer courses on a Plan of Study is subject to approval by the degree program and the Graduate College Dean．

## Sandra Day O＇Connor College of Law Credit

The Graduate College accepts a numerical grade of 70 or above for courses taken in the ASU Sandra Day O＇Connor College of Law as part of an approved Plan of Study．These grades are not used in the two GPAs calculated for graduation unless needed，as determined by the Graduate College．

## Repeating ASU Courses

Graduate students（degree or non－degree）may retake any course at ASU；however，all grades remain on the student transcript as well as in all GPA calculations．

## Graduate Foreign Language Examination（FLE）

A graduate degree program may require at least a reading level proficiency of a foreign language relevant to the student＇s area of study．Students who are required to demonstrate proficiency in a foreign language must pass the Graduate Foreign Language Examination specific to their particular graduate program．Students must be enrolled for a minimum of one credit hour during the term in which they take the examination．

Students must successfully complete the Foreign Language Examination before taking any required comprehensive examinations or scheduling the final oral defense of the thesis or dissertation．A student may petition the Graduate College for a re－examination but must pass the examination in no more than three attempts．

## Master＇s Degree

## Master＇s Degree Plan of Study（iPOS）

Students must submit an iPOS before completing 50 percent of the credit hours required for their degree program．A student is not eligible to apply for the comprehensive examination or thesis without an approved iPOS．

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## Master＇s Degree Minimum Credit Hours

A minimum of 30 semester hours of graduate work is required for the master＇s degree at ASU．If a thesis is required，six（and only six）of the minimum required credit hours on an iPOS must be 599 Thesis credits．Plans of Study submitted for master＇s degrees that do not have a thesis requirement may not include 599 Thesis credits．

## Master＇s Degree Maximum Time Limit

All work toward a master＇s degree must be completed within six consecutive years．The six years begins with the semester and year of admission to the program．Graduate courses taken prior to admission that are included on the Plan of Study must have been completed within three years of the semester and year of admission to the program．

## Master＇s Degree Supervisory Committee

A master＇s supervisory committee must be appointed before the student may apply for the comprehensive examination or applied project，or before the student can register for 599 Thesis credits（if applicable）．The committee is appointed by the Graduate College Dean upon the recommendation of the head of the academic unit．The supervisory committee is comprised of a minimum of three members，including a chair or co－chairs．

Tenured／tenure－track faculty may serve as members of a master＇s graduate supervisory committee，chair or co－ chair．The chair of the committee is typically from the student＇s degree program and should be carefully selected by the student to guide their work．ASU academic professionals or non－tenure accruing faculty with appropriate academic credentials may serve as a member or co－chair on master＇s committees；they may not serve as chair of a master＇s supervisory committee．

## Master＇s Thesis／Thesis Defense

To satisfy the research requirement for master＇s degrees，a student is expected to present a thesis that is defended in an oral examination．Degree programs may have additional requirements in addition to the thesis （e．g．comprehensive examinations）．Students should check with their degree program to confirm requirements． An oral defense of the thesis is required and must be completed to the satisfaction of the supervisory committee．Students must be physically present at the oral defense of their thesis．Students must be registered for：

人 At least one semester hour of credit that appears on the Plan of Study；OR
人 At least one semester hour of appropriate graduate－level credit，for example：Research（592），Thesis （599），or Continuing Registration（595 or 695）；OR

人 At least one hour of a graduate－level course．
Revisions to the thesis are typical and must be completed in a timely manner．If the student is unable to complete revisions to the thesis and submit to UMI／ProQuest by the deadline for the semester in which the defense is held，the student must complete the revisions，remain continuously enrolled，and present the final document to UMI／ProQuest within one year of the defense．Failure to do so will require the re－submission of the document for format review and may result in re－defense of the thesis to ensure currency of the research．

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## Other Master's Culminating Experiences

A comprehensive examination, capstone course, applied project or portfolio is required as a culminating experience in master's programs that do not have a thesis requirement. The Graduate College requires a written component to the comprehensive examination; academic units may also require an oral component. Students must have an approved iPOS prior to scheduling their comprehensive examination and/or registering for their applied project or capstone course. An oral defense of an applied project is required and must be completed to the satisfaction of the supervisory committee.

## Master's Comprehensive Examination

Students must be in good academic standing regarding GPA requirements (see previous section titled "Satisfactory Academic Progress") prior to taking master's comprehensive examinations.

Students are required to register for at least one semester hour of credit that appears on the iPOS or one hour of appropriate graduate-level credit during the fall, winter, spring or summer session in which they take their comprehensive examinations.

The master's comprehensive examination must have a written component; however, individual master's degree programs may require an additional oral component of the comprehensive exam for all of their students based on the academic progress policy of the program.

The student must schedule the comprehensive examination with their academic unit. The results of the examination must be reported to the Graduate College within the semester it is completed. Failing the comprehensive examination is considered final unless the supervisory committee and the head of the academic unit recommend re-examination. A petition for re-examination, endorsed by the members of the student's supervisory committee and the head of the academic unit, must be approved by the Graduate College Dean before a student can take the re-examination. Only one re-examination is permitted and must be administered no sooner than three months and no later than one year from the date of the original examination. If the student's petition for re-examination is not approved or the student fails the re-examination, the Graduate College will withdraw the student from their degree program.

Students choosing to appeal the results of their comprehensive examinations must follow the grade appeals process outlined by their academic unit.

Foreign language requirements, if applicable, must be fulfilled before taking the comprehensive examinations.

## Doctorate Degree

## Doctoral Degree Plan of Study (iPOS)

Students must submit an iPOS before completing 50 percent of the credit hours required for their degree program. A student is not eligible to apply for the Foreign Language Examination (if applicable), comprehensive examinations, dissertation proposal/prospectus or dissertation defense (if applicable) without an approved iPOS.

## Doctoral Degree Minimum Credit Hours

A minimum of 84 semester hours of graduate work is required for the doctorate degree at ASU. If a dissertation is required, 12 (and only 12) of the minimum required credit hours on an iPOS must be 799 Dissertation credits. Plans of Study submitted for doctorate degrees that do not have a dissertation requirement may not include 799 Dissertation credits. Students may apply 30 credit hours from a previously awarded master's degree toward their doctoral Plan of Study with approval of the degree program and the Graduate College Dean.

## Doctoral Degree Maximum Time Limit

Doctoral students must complete all program requirements within a ten-year period. The ten-year period begins with the semester and year of admission to the doctoral program. Graduate courses taken prior to admission that are included on the iPOS must have been completed within three years of the semester and year of admission to the program (previously awarded master's degrees used on the Plan of Study are exempt).

Additionally, the student must defend the dissertation within five years after passing the comprehensive examinations. Therefore, the maximum time limit is the shortest of the following:

人 Time period since initial enrollment ( 10 year time limit); OR
人 Time after passing the comprehensive exams (5 year time limit).
Any exception must be approved by the supervisory committee, the head of the academic unit and the Graduate College Dean. If a time limit exception is approved, the student may need to re-take the comprehensive examinations. The Graduate College may withdraw students who are unable to complete all degree requirements and graduate within the allowed maximum time limits.

## Doctoral Degree Supervisory Committee

Upon the recommendation of the head of the academic unit, the Graduate College Dean appoints the student's dissertation committee. The committee must be comprised of at least three members, including either a chair or co-chairs. Doctoral programs may have additional requirements for committee composition. This committee serves as the intellectual guide for the student and must approve the research/scholarly focus and substance of the dissertation. The members of the dissertation committee have the necessary knowledge and skills to advise the student during the formulation of the research topic and during the completion of the research and the dissertation.

Dissertation chairs and co-chairs must be approved by the Graduate College Dean and each degree program maintains the list of faculty approved by the Graduate College to do so. Most resident faculty at ASU may serve on dissertation committees with the proviso that they have appropriate expertise in the discipline.

All Ph.D. programs have a Graduate Faculty. The Graduate Faculty in a Ph.D. program may also include highly qualified individuals from outside the university who have been approved to serve on committees. Each Ph.D. program maintains the list of faculty approved by the Graduate College to chair or co-chair Ph.D. dissertations. Additional information regarding ASU Graduate Faculty can be found at http://graduate.asu.edu/graduate faculty initiative.

Doctoral students (including PhD, DMA, DBH, DNP and EdD) are urged to communicate with their academic unit to confirm eligibility of faculty to chair doctorate committees.

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The final committee membership must be appointed by the Graduate College Dean before the student may apply for comprehensive examinations，defend the dissertation prospectus，and register for 799 Dissertation course credits（if applicable）．

## Doctoral Comprehensive Examination

Students must be in good academic standing regarding GPA requirements（see previous section titled ＂Satisfactory Academic Progress＂）prior to taking doctoral comprehensive examinations．

When students have essentially completed the coursework on an approved iPOS，they must request permission to take the doctoral comprehensive examination．The doctoral comprehensive examination must have a written component；however individual doctoral programs may require an additional subsequent oral component of the comprehensive exam for all of their students based on the academic progress policy of the program．These examination（s）are designed to assess a student＇s mastery of the field of specialization．Doctoral comprehensive examination（s）are administered by a committee consisting of a minimum of three members．

Foreign language requirements，if applicable，must be satisfied before taking the comprehensive examination（s）． During the fall，winter，spring or summer session that the student takes the comprehensive examination（s），they are required to register for ：

人 At least one semester hour of credit that appears on the Plan of Study；OR
人 At least one semester hour of appropriate graduate－level credit，for example：Research（792）， Dissertation（799），or Continuing Registration（795）；OR
人 At least one hour of a graduate－level course．
All comprehensive examination results must be reported to the Graduate College immediately upon completion． Academic units are not required to allow students a second opportunity；upon failing comprehensive examinations，academic units may submit a recommendation to the Graduate College requesting dismissal of the student from the degree program．

Failing the comprehensive examination（s）is considered final unless the supervisory committee and the head of the academic unit recommend，and the Graduate College Dean approve a re－examination．Only one re－examination is permitted．A petition with substantial justification for re－examination，endorsed by the members of the student＇s supervisory committee and the head of the academic unit，must be approved by the Graduate College Dean before a student can take the examination a second time． Re－examination may be administered no sooner than three months and no later than one year from the date of the original examination．The Graduate College may withdraw a student from the degree program if the student＇s petition for re－examination is not approved，or if the student fails to successfully pass the retake of the comprehensive examination（s）．

Students choosing to appeal the results of their comprehensive examinations must follow the grade appeals process outlined by their academic unit．

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## Doctoral Prospectus Defense

All doctoral degree programs that require students to complete a dissertation must require students to complete a dissertation proposal／prospectus and submit the results to the Graduate College．Failure of the doctoral dissertation prospectus oral defense is considered final unless the supervisory committee and the head of the academic unit recommend，and the Graduate College Dean approve a second proposal defense．If a petition is approved，the student must submit the new prospectus by the end of six months（the six months begins from the date that the first doctoral dissertation proposal defense was held）．If the academic unit does not grant the student permission to retake the proposal defense，or if the student fails to pass the retake of the proposal defense，the Graduate College may withdraw the student from the degree program．

## Doctoral Candidacy

Doctoral students（with specific degree program exceptions approved by the Graduate College Dean）achieve candidacy status upon the successful completion of the comprehensive examination（s），the Foreign Language Examination（if applicable），and successfully defending the dissertation prospectus（if applicable）．Doctoral students who have been advanced to candidacy are required to maintain continuous enrollment until all degree requirements have been completed and the student graduated．

## Doctoral Dissertation／Dissertation Defense

The written doctoral dissertation is based on an original and substantial scholarly work that constitutes a significant contribution to knowledge in the student＇s discipline．The dissertation research must be conducted during the time of the student＇s doctoral studies at ASU，under guidance of ASU Graduate Faculty，and in accordance with Graduate College policies and procedures．The composition of the dissertation is defined by the degree program with the approval of the Graduate College Dean．

The dissertation research experience culminates in a final oral exam，commonly known as the＂dissertation defense．＂A final public dissertation defense is required．Students must be physically present at the oral defense of their dissertation．During the semester that the student defends the dissertation they are required to register for：

人 At least one semester hour of credit that appears on the Plan of Study；OR
入 At least one semester hour of appropriate graduate－level credit，for example：Research（792）， Dissertation（799），or Continuing Registration（795）；OR

人 At least one hour of a graduate－level course．
Revisions to the dissertation are typical and must be completed in a timely manner．If the student is unable to complete revisions to the thesis and submit to UMI／ProQuest by the deadline for the semester in which the defense is held，the student must complete the revisions，remain continuously enrolled，and present the final document to UMI／ProQuest within one year of the defense．Failure to do so will require the re－submission of the document for format review and may result in re－defense of the dissertation to ensure currency of the research．

## Other Graduate Educational Opportunities

## Graduate Certificates

The graduate certificate is a programmatic series of linked courses. Graduate certificates facilitate professional growth for people who already hold the baccalaureate degree. For more information on current graduate certificates see the Graduate Degree and Certificate Search page.

## Certificate Admission

All applications for graduate certificate programs must be submitted through http://asu.edu/gradapp.

## Certificate Requirements

A minimum of 15 semester hours of graduate work is required to complete a graduate certificate. No more than one-fifth ( 20 percent) of the minimum required credit hours for a graduate certificate may be transferred from another university. All transfer work must meet Graduate College transfer policies. All coursework used to complete an ASU graduate certificate must be completed within a six-year time limit. Courses at a 400 -level may be allowed with prior approval from the appropriate certificate program; however, a minimum of two-thirds of the courses taken to complete the certificate must be at the 500 -level or above. No more than $40 \%$ of coursework towards the requirements of a graduate certificate can be completed prior to admission to the certificate program.

## Awarding of a Graduate Certificate

A student will be eligible for the official posting of the graduate certificate to their transcripts when all applicable coursework has been successfully completed and Graduate College scholarship requirements have been met. Students must submit an iPOS for the graduate certificate program.

## Concurrent Master's Degrees

A student may pursue concurrent master's degrees with prior written approval from the head of the academic unit for each degree program and the Graduate College. A maximum of 20 percent of the minimum total semester hours for the completion of both degrees may be common hours shared between the Plans of Study. The total number of hours common to both degree programs may vary from this maximum value only when the Graduate College has formally approved coordinated degree programs.

Coursework common to both programs must constitute a well-planned and meaningful part of each of the programs and may only include coursework completed after admission to both degree programs. In all cases, the guidelines below must be followed:

1. The student must be enrolled in both programs each fall and spring semester to maintain continuous enrollment or must petition for a leave of absence. Any approved leave of absence applies to both degree programs.
2. Graduate credit transferred from another institution may be applied toward only one degree program.
3. Culminating experiences (e.g. capstone courses, theses, applied projects) and comprehensive examinations cannot be shared between concurrent degree programs.

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4. The six year maximum time limit for completing degree requirements and graduation apply to each concurrent degree individually.

Concurrent enrollment in a doctoral program and master's degree program may not have common hours. Doctoral programs and master's degrees in the same major may not be concurrently pursued.

## Concurrent Doctoral Degrees

A student may pursue concurrent doctoral degrees with prior written approval from the head of the academic unit for each degree program and the Graduate College. In all cases, the guidelines below must be followed:

1. The student must be enrolled in both programs each fall and spring semester to maintain continuous enrollment or must petition for a leave of absence. Any approved leave of absence applies to both degree programs.
2. The 30 hours allowed from a previously awarded master's degree may only be applied to one of the doctoral programs and graduate credit transferred from another institution may be applied toward only one degree program.
3. The comprehensive examination, the dissertation prospectus, and the dissertation cannot be shared between concurrent degree programs.
4. The student must meet the 10 year maximum time limit and five year limit after comprehensive exams for each degree.

## Master's in Passing (MIP)

In those cases where there is an approved Master's in Passing (MIP) program in place for a doctoral degree, those doctoral students who complete the requirements of the approved MIP may be awarded the related master's degree. Students should check with their doctoral program to see if there is an approved Master's in Passing for their degree.

Students who include 30 hours from a previously awarded master's degree on their doctoral Plan of Study are not eligible for a Master's in Passing. All coursework included in an MIP Plan of Study must have been completed after the semester and year of admission to the doctoral program.

## Bachelor's/Master's Degree (4+1)

Some academic units offer high-achieving students an opportunity to pursue a Bachelor's/Master's degree program (commonly referred to as $4+1$ ). The $4+1$ programs must be formally approved and are available only to ASU students.

Students admitted to 4+1 degree programs may take ASU graduate-level courses as an undergraduate student that are shared with both the bachelor's degree and the master's degree enabling them to obtain both degrees within five years; provided the approved program allows for the sharing of credit hours. Students do not graduate with both degrees during the same semester of enrollment; upon completion of the bachelor's degree students are enrolled as graduate students for completion of the master's degree. Students should contact their academic unit for specific information.

Students may not share any credit hours taken as an undergraduate student unless they have been formally admitted to an approved $4+1$ degree program.

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## Research Considerations

The master's thesis and doctoral dissertation (or equivalent) must be based on original and independent research/creative activity conducted by the student, under the guidance of the graduate supervisory committee. The thesis is an introduction to scholarly writing and is intended to create an understanding of theory and methods applicable to one's field. The dissertation should demonstrate the candidate's mastery of research and scholarly methodologies, theory, and tools of the discipline. Both the thesis and dissertation should demonstrate the candidate's ability to address a major intellectual problem and to propose meaningful questions and hypotheses, as well as utilize the methods with which to study the proposed research question(s) and related hypotheses, and draw conclusions.

## Supervisory Committees

Students are guided by faculty mentors who advise them through their degree program. Students should identify their advisors early in their graduate career and look to them for guidance in their graduate work. Once the student has selected a thesis/dissertation committee, the head of the academic unit recommends the supervisory committee to the Graduate College Dean who reviews and appoints the Committee. Graduate supervisory committees must consist of a minimum of three individuals, including the chair or co-chairs.

Faculty Emeriti who meet Graduate College criteria may serve as members or co-chairs on graduate supervisory committees. They may serve as chairs with the recommendation of the academic unit and approval of the Graduate College Dean on a case by case basis. Qualified individuals outside the university, upon the recommendation of the head of the academic unit and approval of the Graduate College, may serve as members of thesis and dissertation committees. All such requests must be submitted to the Graduate College Dean for approval.

## Research Involving Human and Animal Subjects

Theses or dissertations that make use of research involving human or animal subjects must include a statement indicating that the research has been approved by the appropriate university body.

Research involving human subjects conducted under the auspices of Arizona State University is reviewed by the University Human Subjects Institutional Review Board (IRB) in compliance with federal regulations. Documents containing any data collection from human subjects require that applications be submitted to the ASU Office of Research Integrity and Assurance for approval before data collection or recruitment of subjects is initiated at http://researchintegrity.asu.edu/humans.

Research involving the use of animals conducted under the auspices of Arizona State University is reviewed by the Institutional Animal Care and Use Committee (IACUC) in compliance with federal regulations. Documents containing any data collection from animal research require that applications be submitted to ASU Office of Research Integrity and Assurance for approval at http://researchintegrity.asu.edu/animals/IACUC+Overview.

It is very important that students check with their thesis/dissertation advisor well in advance of data collection to ensure compliance with university regulations regarding the collection of research data.

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## Thesis/Dissertation Defenses

Thesis and dissertation defenses are open to all members of the university community and the general public. The oral defense engages the supervisory committee and the candidate in a critical and analytical discussion of the research and findings of the study, as well as a review of the contribution of the research topic to advancing knowledge in that discipline. The presentation of a thesis or dissertation defense in an open forum fosters a broader awareness of the state of graduate research at ASU, promotes a wider scholarly dialogue among disciplines, and recognizes publicly the scholarly contributions of master's or doctoral candidates.

Defenses must be scheduled with the Graduate College at least 10 working days in advance of the defense date. It is expected that oral defenses will be held on an ASU campus during regular business hours in order to facilitate student, faculty, and public accessibility. When there are sound educational reasons for holding a defense under different circumstances, contact the Graduate College for approval before scheduling the defense.

Students must be physically present at the oral defense of their thesis, dissertation or equivalent document. If, due to unforeseen circumstances, they cannot be physically present, then the oral defense must be rescheduled to another date when they can be physically present.

It is desirable that all members of a student's supervisory committee be physically present with the student at the final oral defense of a thesis or dissertation. However, there are situations (e.g. faculty travel, faculty emergencies and/or faculty leave) that may necessitate holding a defense with one or more committee member(s) absent. If a committee member cannot physically attend, they can tele/video conference, or they can appoint a substitute to attend in their place. The substitute should be a regular faculty member with the academic unit. The supervisory committee chair must be physically present; if there are two co-chairs, one of them may tele/video conference if needed. In either case, please email grad-ges@asu.edu with the student's ID number and the name of the tele/videoconferencing member or with the names of the member who will be absent and the faculty member who will attend as a substitute. This information must be submitted before the defense.

## Degree Completion

The final culminating experiences for graduate degrees vary by program. In many master's degree programs a thesis is required, in other programs the culminating experience is an applied or professional project. In all Ph.D. programs, as well as in most professional doctoral programs, dissertations are required. Theses and dissertations are officially documented and archived. Theses and dissertations are submitted to UMI/ProQuest, which makes their content available to the public. Information on the dissertation later appears in Dissertation Abstracts International. For this reason, all theses and dissertations must undergo Graduate College format review. The Graduate College Dean reviews the content to affirm the quality and originality of the scholarly work.

## Scheduling a Defense and Format Review

At least 10 working days prior to the planned defense of a thesis, dissertation or equivalent, students schedule the defense through their MyASU. See Graduation Deadlines. Students work with their supervisory committee and the academic unit's graduate support staff to identify a suitable date and reserve a room. When a defense

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date and location have been identified, students submit the appropriate schedule a defense form, and a draft copy of the thesis/dissertation via email to gradformat@asu.edu. The defense will be published on the Graduate College Master's/Doctoral Defense Schedule website that updates every Monday.

The Format Manual is a comprehensive guide to formatting a thesis, dissertation or equivalent document and it always overrides a Style Guide if the two conflict. Students must use the Format Manual to prepare their thesis/dissertation. Questions regarding the Format Manual requirements should be directed to gradformat@asu.edu.

The Graduate College's Formatting Tool uses the Format Manual formatting guidelines to generate a template into which you insert your document's text. The formatting tool is designed to help students with the basic format requirements such as margins and spacing, and greatly improves the format review process for students.

## UMI/ProQuest Submission

Students are required to create a new user account specific to the submission of their document and must use their ASU email address. UMI/ProQuest requires all students to submit a PDF version of their final document. The ASU Graduate College requires that the PDF document is in compliance with the formatting standards presented in the format manual. Students will receive final format approval only after the submitted PDF document has successfully passed a format review. Students have an opportunity to order bound copies of their document for themselves through UMI/ProQuest; they may also go to the ASU Bookstore, or any third party bindery to obtain bound copies of their document if desired.

## Graduation

Students must apply for graduation through MyASU in accordance with the University Registrar policies. See Application for Graduation. Students must meet all University and Graduate College degree requirements prior to the conferral of their degree.

The graduation deadlines and procedures are set by the Graduate College and are available online at http://graduate.asu.edu/progress/graduation deadlines. Deadline dates vary slightly depending on the calendar year, so students should check them carefully in advance of the semester they plan to defend their thesis/dissertation. It is very important that students become familiar with these deadlines so that graduation can occur during the expected term.

## Graduate Student Appeals

The Graduate Council Appeals Board (GCAB) serves as the appeals body for graduate students seeking redress on academic decisions regarding their graduate programs. Before initiating an appeal, the graduate student must fully utilize all other appeal and review processes available in the student's program, academic unit, or college/school. The student should also discuss the situation with the Graduate College dean's office to explore resolution of the matter at the unit or college level before filing an appeal.

The GCAB reviews written appeals of graduate students concerning:
人 Retention in graduate programs (with the limitations described below).

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人 Procedural matters in graduate student programs（e．g．，procedures related to Plans of Study，theses， dissertations，and preliminary，qualifying or comprehensive exams）．
人 Other academic issues that are not covered by other university policies or processes．

The GCAB will not entertain any appeals until the graduate student has fully utilized all other appropriate appeal procedures through their academic unit and college．

The GCAB does not review appeals pertaining to the following areas because these appeals are heard by other university bodies（see parenthesis below）：

人 Course grades（subject to review by the academic unit and college／school）．
人 Results of capstone experiences，comprehensive and qualifying examinations and defenses （subject to review by the academic unit and college／school）．
$\lambda$ Allegations of academic dishonesty（subject to review under the ASU Student Academic Integrity Policy）．
人 Allegations of scientific misconduct（subject to review under ASU policy RSP 210 ［＂Misconduct in Research＂］in the Research and Sponsored Projects Policy and Procedures Manual）．
人 Allegations of discrimination（subject to review by the ASU Office of Diversity）．

The Guidelines for Graduate Appeals describing further the GCAB appeal procedures，process，and jurisdiction are available from the Graduate College and on the website at： http：／／graduate．asu．edu／faculty staff／policies／graduate student appeals．

Arizona State University does not discriminate on the basis of race，color，national origin，sex，sexual orientation，gender identity，disability，religion，age or veteran status in the University＇s services，educational programs，and activities， including，but not limited to，admission to and employment by the University．The Office of Diversity has been designated to handle inquiries regarding the University＇s non－discrimination policies：Director，Office of Diversity，University Services Building， 1551 S．Rural Rd．，Tempe，Arizona 85287，Intercampus Mail Code 5612．Phone：（480）965－5057；TTY（480）965－ 0471．For information generally about ASU＇s non－discrimination policies and procedures for filing complaints，please see http：／／cfo．asu．edu／hr－diversity．Some deadlines for filing complaints are as short as thirty days．

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## College Policies

## Business, W. P. Carey School of

The W. P. Carey School of Business is one of the largest and highest-ranked business schools in the country, repeatedly lauded by publications like The Wall Street Journal, Financial Times, Princeton Review and U.S. News \& World Report. The school is internationally regarded for its leadership in business education, research productivity and distinguished faculty members, including a Nobel Prize winner. Students come from all over the world and include dozens of National Merit Scholars.
Our academic choices are as diverse as they are abundant. Undergraduates can earn a B.S. degree in one of eight business disciplines or a B.A. combining core business classes with a concentration outside the W. P. Carey School. Our programs of study reflect and respond to the demands of business and industry today and beyond, and we have dedicated career placement services. We are located in the heart of the fast-growing Phoenix metropolitan area, which provides opportunities for internships, employment and networking. Our classes are offered on ASU's Tempe, Polytechnic, West and Downtown Phoenix campuses. For more information, visit wpcarey.asu.edu [1].

## Undergraduate Policies

## Academic Integrity

## Academic Dishonesty

The faculty of the W. P. Carey School of Business follow the guidelines in the Student Academic Integrity Policy on academic dishonesty. A copy of the policy may be obtained in the undergraduate programs office, BA 109.

## Academic Standing

## Probation

All business students, freshman through senior, must maintain a minimum 2.00 GPA for all courses completed at ASU. If this standard is not maintained, the student is placed on probation. Students on probation must see an advisor before further registration. Students on probation must obtain a semester GPA of 2.50 with no grade lower than a "C". If a student on probation meets this requirement, but the cumulative GPA remains below 2.00, the student is given one additional semester on continued probation. At the end of continued probation, the student must return to Academic Good Standing (a minimum cumulative ASU GPA of 2.00) to avoid disqualification.

## Disqualification

Students who do not meet probation requirements are academically disqualified. Disqualified students should meet with an academic advisor. These students may attend ASU during summer session.

## Advising

W. P. Carey Undergraduate Programs offers academic advising at the Polytechnic (PRLTA 330), Tempe (BA 109), and West (FAB N101) campuses. Students may find personalized advising information and schedule appointments, in advance, at http://wpcarey.asu.edu/sos/ [2]. Students admitted to the W. P. Carey Academy or Business Honors program may schedule appointments by visiting BA 111 or calling 480-965-8710.
To ensure that students are making progress toward their degree, we encourage students to schedule appointments each semester. We require advising for:
Newly admitted students prior to enrollment for the first term (at orientation).
Freshman students each semester in the first year.
Transfer students prior to their intial enrollment.
Seniors, upon completion of 87 or more credit hours.
Any student who is on academic probation.
Any student who is off track in regards to Sun Devil Tracking requirements.
For additional information regarding academic advising, visit http://wpcarey.asu.edu/advising [3] or contact the W. P. Carey School of Business Undergraduate Programs Office at 480-965-4227.

## Credit/Registration

Pass/Fail
Business majors may not enroll on a pass/fail basis for any course required for graduation. Pass/fail credits taken at another institution may be petitioned for use, but only if the student can demonstrate proof that the pass grade was equivalent to a " C " (2.00) or higher.

## Transfer Credit

Credit from other institutions is accepted subject to the following guidelines. Students planning to take their first two years of work at a community college or another four-year college should take only those courses in business and economics that are offered as freshman- or sophomore-level courses at any of the state-supported Arizona universities. These lower-division courses are
numbered 100 through 299. A maximum of 30 hours of business and economics courses from community colleges are accepted toward a bachelor's degree in business.
Students may transfer a maximum of nine credit hours of approved upper-division business course work required for the business degree to ASU. Professional business courses taught in the junior or senior year in the state universities may not be completed at a two-year college for transfer credit in the business core or major. Such courses may be utilized in the free elective category subject to the 30-hour limitation. Courses taught as vocational or career classes at the community colleges that are not taught in the schools of business at any one of the state universities are not accepted for credit toward a bachelor's degree. Courses taught in the upperdivision business core at the state universities must be completed at the degree-granting institution unless transferred from an accredited four-year school. Normally, upper-division transfer credits are accepted only from AACSB International accredited schools. To be accepted for credit as part of a degree program in business, all courses transferred from other institutions must carry prerequisites similar to those of the courses they are replacing at ASU.

## Degree Requirements

## Critical Requirements

All business students must meet the critical requirements for their intended majors. Students who do not comply with the critical requirements are offtrack and have holds placed on their records. These students must meet with an advisor to have this hold removed. For more information, access the Web site at http://wpcarey.asu.edu/undergraduate/current-
students/advising/tracking.cfm [4].

## Reinstatement/Readmission

Students seeking readmission (after an absence from the university) should contact the undergraduate programs office, in BA 109, regarding policies and procedures.

## Other Special Requirements

## Student Appeal Procedure on Grades

The faculty of the W. P. Carey School of Business have adopted a policy on the student appeal procedure on grades. A copy of the policy may be obtained in the undergraduate programs office, BA 109.

## SAT/ACT Test Scores

See SAT/ACT test score requirements at http://students.asu.edu/admission/competencies [5].

## Admissions

Because of the additional requirements for the Bachelor of Science (B.S.) degree, students who do not meet minimum admission standards will automatically be considered for the Bachelors of Arts (B.A.) in the W.P. Carey School of Business. Freshman admission requirements for the B.A. program are the same as the university's freshman admission requirements. Transfer students must have a 3.00 GPA for all transfer work and meet university transfer admission requirements to be placed into the B.A. program.

## Graduate Policies

All graduate students in the W. P. Carey School of Business are required to maintain a cumulative GPA of "B" (3.00). See individual graduate degree programs for specific requirements on satisfactory academic progress, probation and disqualification.

## Advising

Advising of graduate students is normally handled by graduate faculty members. Once admitted, a student can request a temporary faculty advisor in a potential area of concentration in order to prepare a program of study. Students are encouraged to begin discussions with faculty members early in their studies so that course work can be geared toward supporting their academic progress. All students, whether in a thesis or nonthesis option, must file a program of study.

Source URL: http://catalog.asu.edu/policies/business
Links:
[1] http://wpcarey.asu.edu/
[2] http://wpcarey.asu.edu/sos/
[3] http://wpcarey.asu.edu/advising
[4] http://wpcarey.asu.edu/undergraduate/current-students/advising/tracking.cfm
[5] http://students.asu.edu/admission/competencies
Design and the Arts, Herberger Institute for

## Undergraduate Policies

Academic Integrity

The faculty of the Herberger Institute for Design and the Arts follow ASU's Academic Integrity Policy on academic dishonesty. Information on ASU's Academic Integrity Policy and ways to complete your work with integrity can be found here:http://provost.asu.edu/academicintegrity/students [1].

## Academic Standing

## Probation

A student in any of the institute's programs is placed on probation when he or she fails to maintain a cumulative GPA of 2.00. Students on probation must observe rules or limitations the institute imposes on their probation as a condition of retention. Students are encouraged to seek advising from their major academic advisor, in an effort to improve academic standing. All Herberger Institute students who are placed on academic probation and continuing probation are required to attend mandatory advising appointments. Students will also be required to complete an academic success contract with their advisor to discuss campus academic resources, plan out semester goals and discuss strategies to attain academic success. These meetings will continue until the student earns a cumulative GPA of 2.00 or higher.

## Disqualification

If, after one semester on probation, the overall GPA is not at the required level and the conditions of probation have not been met, the student is disqualified for a minimum of two full academic semesters. Disqualification is exercised at the discretion of the institute and becomes effective on the first day of the fall or spring semester following institute action. A disqualified student is notified by the Office of the Registrar or the dean of the institute and is not allowed to register for a fall or spring semester at the university until reinstated. Students whose cumulative GPA is below 2.00, but are still in academic good standing according to university standards, are ineligible to major in the School of Architecture and Landscape Architecture (SALA), but may be eligible for majors in other colleges at ASU.

## Reinstatement

Students seeking reinstatement after disqualification should contact the Herberger Institute Office of Student Success regarding procedures and guidance for returning to good standing. A disqualified student may attend summer sessions at ASU to raise their cumulative GPA. If a 2.00 or higher cumulative GPA is achieved upon completion of summer course work, the student may petition the institute for early reinstatement. Appeals may be made to the Herberger Institute Curriculum Committee; see an academic advisor for the necessary appeal forms. There are also other options available for immediate reinstatement for qualified students; see an academic advisor to discuss these options. For more information, see Retention and Academic Standards. When reinstatement includes readmission, application must be made to the Recording and Readmissions section of the University Registrar's Office. All academic disciplinary action is a function of the Herberger Institute Office of Student Success, CDS 101, under the direction of the assistant dean for student success for the institute. Students having academic problems should call this office for advising at 480-965-4495.

## Advising

Undergraduate academic advising is handled as a centralized activity within the institute. Students are encouraged to make appointments through the Herberger Institute Office of Student Success. For more information, call 480-965-4495 or visit our office in Design South (CDS), room 101. While the institute provides academic advising, it is ultimately the responsibility of each student to fulfill academic and program requirements. Administration of program requirements is the responsibility of the head of the academic unit and the dean.

## Credit/Registration

## Transfer Credits

While the university accepts credits transferred from other accredited institutions, transfer course work must be equivalent in both content and level of offering. Arts or design transfer credits are not applied to specific degree programs until reviewed and accepted by the appropriate academic units. Students who change majors to transfer into the institute or one of its program areas must have a minimum cumulative GPA of 2.50 . Students wishing to enter a major that requires an audition, interview, milestone or portfolio review may be required to successfully complete this requirement before changing their major. Students transferring to art, dance, music or theatre and film must complete a creative review to enter most majors, and some arts transfer credit will not be evaluated until after successful completion of the creative review. The SALA requires a review of samples of work (portfolio format) from previous studio classes to evaluate transfer studio credits.

## Incompletes

Students are responsible for contacting the instructor regarding the process of requesting and fulfilling an incomplete. The grade of " $I$ " (Incomplete) can only be given by an instructor when a student, who is doing otherwise acceptable work, is unable to complete a course (e.g., final exam or term paper) because of illness or other conditions beyond the student's control. Students must obtain official "Request for Grade of Incomplete" form at http://students.asu.edu/forms/incomplete-grade-request [2]. The completed form must include a justification, a listing of requirements that have not been fulfilled and a proposed schedule of completion. The instructor reviews the request and determines whether to accept or deny the request. If accepted, the instructor may propose modifications, if necessary, and submits a copy of the request to the appropriate office. An incomplete in any course that is a
prerequisite for sequential courses automatically denies enrollment in subsequent courses or could result in the student being administratively dropped from a subsequent course if the student has already enrolled.

## Withdrawals

University withdrawal regulations apply to all courses. In addition, because the institute's curricula are modular and sequential and because space in the programs is limited, a student is expected to progress through the curriculum with his or her class.

## Pass/Fail or Credit/No Credit

The only courses accepted toward graduation with a grade of pass/fail or credit/no credit are courses designated by the academic unit as such or internships and field studies.

## Degree Requirements

## Change of Major

Current ASU students who wish to change majors to one of the institute's degrees must have a cumulative ASU GPA of 2.50 or higher. Students wishing to enter a major that requires an audition, interview, milestone or portfolio review may be required to successfully complete this requirement before changing their major.
For more information about critical requirements, including the milestone, see herbergerinstitute.asu.edu/degrees/milestone.php [3].

## SALA Critical Requirements

A new or transfer student who has been admitted to the university and has selected a major in the School of Architecture + Landscape Architecture is admitted to the major of his or her choice. Each student must meet all critical requirements including the milestone at the end of the second semester. Students who do not meet all critical requirements, including the milestone, will work with an advisor to explore alternate degree options. For international students whose native language is not English, TOEFL scores are required.

## SALA Milestone

Passing the SALA milestone at the end of the second semester is competitive. Consult the requirements of each major for details: herbergerinstitute.asu.edu/degrees/milestone.php. Students who are interested in more than one program must meet the milestone requirements for both and must submit separate applications and portfolios, as required by the program. Transfers requested past the second semester are considered only if vacancies occur, and such transfers are limited to students with equivalent course work who are competitive with continuing students. Students who do not meet the critical requirements but pass the milestone are not dismissed from the university and may transfer to other programs.
SALA Academic Standards for students who have passed the milestone
Students who have passed the milestone are placed on probation when any of the following occurs:
Admitted to the milestone with deficiencies in course requirements.
An incomplete, failure or withdrawal from any required course.
A semester GPA below 3.00.
A grade of "D" (1.00) or "E" (0.00) in a design studio, a design laboratory or a design lecture.
Violation of the university's Student Code of Conduct or any admission agreement.
Students on probation must observe rules or limitations that the institute or academic unit places on their probation as a condition of continuation. Students may be removed from a program (but not necessarily the university) when any of the following occurs:
The requirements imposed are not met or the probationary semester GPA is below 3.00 after one semester on probation.
Failures or withdrawals in required courses are not resolved at the next offering of the course.
Failures or withdrawals from required sequential courses.
Incompletes in required sequential courses are not completed before the first day of class of the next semester.
A student removed from a program is not guaranteed reinstatement to the program even if probation requirements or requirements placed on readmission are fulfilled. Appeals may be made first to the appropriate academic unit and, if necessary, to the Herberger Institute Curriculum Committee. For more information, see Retention and Academic Standards.
SALA Studio Requirements
Students must earn a grade of "C" (2.00) or higher in SALA studio courses in order to progress to the next studio in sequence. If a student is already registered for the next studio and has earned a grade of " $D$ " or " $E$ " in the prerequisite studio, the student will be administratively dropped from the subsequent studio.

## Reinstatement/Readmission

## Appeals Procedures

Academic appeals and requests for variances are typically made to the student's instructor and then, if necessary, to the head of the appropriate academic unit, the assistant dean for student success, the Herberger Institute Curriculum Committee, and finally, the dean. A student who feels unjustly treated in academic or other matters relating to his or her career as a student should follow the grievance procedure outlined on the institute Web site.

## Other Special Requirements

Creative Reviews
A creative review (audition, interview, portfolio submission) is required for entrance into most majors in the Herberger Institute. Seehttp://herbergerinstitute.asu.edu/students/undergrad/prospective/apply_to_major.php [4] for details.

## Graduate Policies

## Advising

Advising is handled as a decentralized activity within the institute. To offer personalized attention, each academic unit establishes its own graduate advising procedures. Students are encouraged to make appointments through the central office of their major discipline. Students should consult their academic unit's Web site for general information about the programs, admission and advising procedures:
School of Architecture and Landscape Architecture: http://herbergerinstitute.asu.edu/degrees/sala.php [5]; phone 480-965-3536; emailsala@asu.edu [6].
School of Art: http://art.asu.edu/ [7]; phone 480-965-6303.
School of Arts, Media and Engineering: http://ame.asu.edu/ [8]; phone 480-965-9438.
School of Dance: http://dance.asu.edu/ [9]; phone 480-965-5029.
School of Music: http://music.asu.edu/ [10]; phone 480-965-5069.
School of Theatre and Film: http://theatrefilm.asu.edu/ [11]; phone 480-965-5337.

Source URL: http://catalog.asu.edu/policies/design and arts
Links:
[1] http://provost.asu.edu/academicintegrity/students
[2] http://students.asu.edu/forms/incomplete-grade-request
[3] http://herbergerinstitute.asu.edu/degrees/milestone.php
[4] http://herbergerinstitute.asu.edu/students/undergrad/prospective/apply_to_major.php
[5] http://herbergerinstitute.asu.edu/degrees/sala.php
[6] mailto:sala.grad@asu.edu
[7] http://art.asu.edu/
[8] http://ame.asu.edu/
[9] http://dance.asu.edu/
[10] http://music.asu.edu/
[11] http://theatrefilm.asu.edu/

## Engineering, Ira A. Fulton Schools of

The Ira A. Fulton Schools of Engineering educate undergraduate and graduate engineering students, giving them the knowledge, skills and attitudes they need for success in technically-oriented careers. The schools provide students with a range of educational opportunities by which they may achieve excellence in the major branches of engineering, computer science, informatics and construction management.
The Ira A. Fulton Schools of Engineering take pride in their diversity, their economic and cultural heritages, and in the quality of their graduates. The schools strive to be integral to the community they serve and a lifelong presence in the lives of those within their compass. The schools' educational and research programs are built around the following principles: entrepreneurship; use-inspired research and scholarship; a focus on the individual; intellectual fusion of unique and distinct disciplines; social embeddedness in the local, national and international community; and global engagement.
For more information, see http://engineering.asu.edu [1].
Ira A. Fulton Schools of Engineering Aspirations
Graduates from any of the schools' programs will be technically sound. In addition to technical competency, the Ira A. Fulton Schools of Engineering aspire to develop leaders who are aware of biological issues, well-read, well-spoken and knowledgeable about current business practices. To this end, the schools offer enhanced curricula, special courses and extracurricular activities to enrich the student's stay and to offer every student opportunities to achieve the schools' aspirations.
All the programs within the schools are professional programs, and professionalism is an important component of all the curricula. The schools strive to help students understand and value the various aspects of professionalism, including ethical behavior, a desire for lifelong learning, the ability to communicate with others, and an awareness of how the profession fits into and impacts society. As a first step in ethics, all students are expected to follow the student code of conduct and rules of academic integrity defined by the university, as outlined athttp://provost.asu.edu/academicintegrity [2].

## Undergraduate Policies

## Academic Integrity

Students enrolled in the Ira A. Fulton Schools of engineering are required to maintain high levels of integrity and honesty in their academic progress. The ASU Academic Integrity Policy is strictly enforced and followed. Students with an alleged violation are required to discuss the violation with the professor. Students charged with a violation of the Academic Integrity Policy have the opportunity to appeal the charge and be heard by the Ira A. Fulton Schools of Engineering Standards Hearing Board, who provides recommendations to the dean or the dean's designee. The dean or dean's designee will review the recommendation and render a decision. If the decision is suspension or expulsion, the student may appeal to the Office of the Provost. See the following website for policy information http://provost.asu.edu/academicintegrity [2].
The Ira A. Fulton Schools of Engineering have developed and enforce a number of academic standards. These standards are designed to support students and ensure the quality of the schools' graduates.

## Academic Standing

Student Responsibilities
Students need to make many decisions as they complete their degrees. While the schools and the university have a number of resources available (e.g., faculty, courses, advisors and tutors) to help in making the decisions, students are expected to take responsibility for their decisions.

## Satisfactory Progress

Students are expected to select and successfully complete courses that lead to the timely completion of their degree. Students are said to be making satisfactory progress if they fulfill all of the following:
Maintain an acceptable GPA.
Enroll and complete critical tracking requirements.
Complete courses each semester that are applicable to their degree.
Students who are making satisfactory progress are said to be in good standing.

## Probation

Some students do not make satisfactory progress and these students generally need extra attention and resources to help them get back to academic good standing. Such students are placed on academic probation to help ensure that they get the necessary help. There are many reasons why students fail to make satisfactory progress. Working with an academic advisor to plan a strategy for success is crucial. Students may be required to reduce their course load ( 13 credit hours maximum), retake courses or even take courses outside of the program, if these measures will help bring the student back to academic good standing.
To return to academic good standing in the Ira A. Fulton Schools of Engineering, students with probation status need to earn a minimum semester GPA of 2.25 and earn a minimum cumulative ASU GPA of 2.00 at the end of the probation semester. If enrolled in only one course, a grade of " $\mathrm{C}+$ " (2.33) or better and a minimum cumulative ASU GPA of 2.00 is required to obtain academic good standing.

## Conditions for Probation

A student is placed on probation status when specific academic expectations are not met. Some conditions trigger an automatic placement on probation whereas others trigger an automatic review of the student's case to determine if probation is warranted. When a probation review is triggered, the final decision and any conditions of probation are determined at the program level.
Automatic probation is triggered by any of the following:
A semester or summer session with a GPA less than or equal to 1.50.
Two successive semesters with GPAs less than 2.00.
An ASU cumulative GPA less than 2.00 (for more than 55 credit hours).
Automatic review is triggered by any one of the following:
An ASU cumulative GPA less than 2.00 ( 0 to 55 credit hours).
A cumulative GPA in the major of less than 2.00.
A failure to complete any courses appropriate for the degree during each semester.
Courses completed during summer sessions are not used to reevaluate a student's fall semester probationary status.

## Ineligibility

Students who are on academic probation and fail to meet the schools' retention standards become ineligible to continue working toward a degree within the schools. Ineligible students who cannot transfer to another program within ASU are designated as disqualified.
Ineligibility occurs if the probationary student does any of the following:
Does not attain a semester GPA of 2.25 or higher.
Has a cumulative GPA below 2.00 at the end of the probationary semester.

Has already been on probation for two consecutive semesters.
Fails to complete any courses appropriate for the degree during each semester.
Ineligible students are subject to the following limitations:
Students who change colleges may not register for courses in the Ira A. Fulton Schools of Engineering unless the courses are required by their new major.
Students who register for courses in the Ira A. Fulton Schools of Engineering may be withdrawn from these courses any time during the semester they are registered.
Ineligible students are encouraged to consider these options:
Students may be eligible to change their major to another college if they have an acceptable cumulative GPA. The acceptable GPA level depends on the number of hours of completed course work. Students should contact an advisor in the office of Academic and Student Affairs to determine if they are eligible.

Students may take nonengineering courses during summer and winter sessions.
Students may request a review of their status by contacting the office of Academic and Student Affairs.

## Advising

Successful completion of a program in the Ira A. Fulton Schools of Engineering requires careful planning. While final responsibility for becoming familiar with and understanding academic degree requirements lies with the student, each program employs professional academic advisors who work with students in setting academic and career goals, understanding school and university policies and procedures, meeting degree requirements and becoming familiar with the university's and the school's sources of academic support. Students may also work with a faculty advisor familiar with the chosen field of specialization. Students should consult with an advisor prior to registering each semester. A list of program advisors can be viewed at http://engineering.asu.edu/advising [3].
Students are encouraged to utilize the eAdvisor (http://eadvisor.asu.edu/ [4]) tool for academic planning. eAdvisor provides critical requirements and major maps, which are individualized student reports that lay out a specific, clear and accurate path to timely completion of the intended degree.
Many students find it necessary to work while attending ASU. The working student should endeavor to create a careful balance of work and class responsibilities to avoid academic problems. Students should inform their academic advisors of any outside work or activity so that course loads may be adjusted accordingly.
Staff in the office of Academic and Student Affairs in the Ira A. Fulton Schools of Engineering are available to assist individual students with many different types of advising issues. They work with students to answer general questions about policies and procedures; help with registration transactions; administer the probation, disqualification and readmission processes; oversee disciplinary actions; hear grade grievances and assist with other administrative matters.
Mandatory Advising
All first-year students, student athletes, and students who are found to be having academic difficulty are required to be advised before they can register for classes, including summer sessions. Some programs relax the advising requirement after the first year, so students should consult their academic advisor or reivew their "to do" list in MyASU to determine if advising is required.

## Credit/Registration

Students are required to register for courses using one of the university-provided processes. As part of the registration process, the school enforces the following registration restrictions.

## Maximum Hours

Students enrolled in an undergraduate degree program in the Ira A. Fulton Schools of Engineering may register for a maximum of 19 credit hours per semester. Any student wanting to register for more than the maximum must submit a college standards petition and have an approval on file prior to registering for the overload.

## Probationary Status

Students who have been placed on academic probation must meet with their academic advisor and complete the Probation Success Plan. The success plan is designed to assist students in identifying a path to academic success and can be found at
http://engineering.asu.edu/students/standards [5]. Students on academic probation may enroll in a maximum of 13 credit hours per semester.

## Degree Requirements

Undergraduate Nondegree Status
Students who are enrolled in an undergraduate nondegree status in the schools must obtain advising and approval to register from the office of Academic and Student Affairs before registering each semester.

## Course Prerequisites

Students should consult the schedule of classes and the catalog for course prerequisites. Students who register for courses without the designated prerequisites may be withdrawn without the student's consent at any time before the final examination. Such
withdrawal may be initiated by the instructor, the program chair of the program offering the course, or the dean of the college. In such cases, students will not receive monetary reimbursement.

## Pass/Fail Grades

Students enrolled in the schools do not receive degree credit for pass/fail courses taken at this institution. In addition, no courses in the schools are offered for pass/fail credit. Students requesting credit for pass/fail courses taken at another institution must file an Ira A. Fulton Schools of Engineering standards petition. Each request is judged on its particular merits.
Non-Ira A. Fulton Schools of Engineering Students
Students who are not admissible to programs in the Ira A. Fulton Schools of Engineering and who enroll in another college at ASU, may not register for any 300- or 400-level courses in the schools unless the course(s) are required in their degree program and the students have the proper course prerequisites.

## First-year Composition Requirement

Completion of the first-year composition requirement [6] is required for graduation. Any student whose written or spoken English in any course is unsatisfactory may be required by the appropriate school director of program chair to take additional course work.

## Change of Major

Students interested in changing their major to one of the programs within the Ira A. Fulton Schools of Engineering must meet the schools' admission requirements for transfer students. Change of major is not guaranteed, and students interested in changing majors are encouraged to make an appointment with an advisor in the program of interest to discuss the probability of success and to develop a plan of action to ensure successful advancement to upper-division courses. For admissions information, visit http://engineering.asu.edu/undergraduate/adreqs[7].
Evaluation of Previous Course Work
Transferring from one institution to another or between programs can result in a net loss in credits that count toward the degree. Thus, it is important for students who contemplate transferring into the Ira A. Fulton Schools of Engineering from another institution, whether a community college or four-year institution, to carefully study the catalog material pertaining to the particular program to get a sense of what courses may transfer.
Credit is granted for transferred courses deemed equivalent to corresponding courses in the selected program of study, subject to grade and ASU resident credit requirements. No grades lower than "C" (2.00) are accepted as transfer credit to meet the graduation requirements of the school. Credits transferred from a community college or two-year institution are applied only as lower-division credits. For a listing of the acceptable courses transferable to the various degree programs, prospective Arizona transfer students should consult their advisors and refer to the ASU transfer tools available at http://articulation.asu.edu/ [8].
It should be noted that some courses taken in other ASU colleges or other universities may be acceptable for general university credit but may not be applicable toward the degree requirements of the school. Determination of those particular courses applicable to a specific degree program is made within the appropriate academic unit with approval of the dean.

Currency of Course Work
Courses taken more than five years before admission to degree programs in the Ira A. Fulton Schools of Engineering are not normally accepted for transfer credit, at the option of the program in which the applicant wishes to enroll. Courses completed within the five years preceding admission are judged for their applicability to the student's curriculum.
General Education Development
Students admitted to the university after successful completion of the General Education Development (GED) examination are directly admitted to the Ira A. Fulton Schools of Engineering (B.S.E. or B.S.) program within their major, provided they meet the minimum ACT or SAT score required for freshman admission to the Ira A. Fulton Schools of Engineering.
Graduation Requirements
To qualify for graduation, an Ira A. Fulton Schools of Engineering student must have a minimum cumulative ASU GPA of 2.00 in addition to having a GPA of at least 2.00 for the courses in their major field.
University Graduation Requirements
In addition to program and schools' requirements, students must meet all university graduation requirements [6]. A well-planned program of study enables students to meet all requirements in a timely fashion. Students are encouraged to consult with an academic advisor in planning a program to ensure that they comply with all necessary requirements.

## Reinstatement/Readmission

## Readmission

Undergraduate degree seeking students who previously attended ASU in the Ira Fulton Schools of Engineering but have not been enrolled at ASU for one or two consecutive fall or spring semesters are eligible to return through "Quick Reentry." Students do not need to submit a new application or application fee, but must contact an academic advisor in their program for registration.
Undergraduates who have been away from the university for three or more semesters and want to return to ASU in an Ira A. Fulton Schools of Engineering program, are required to apply for readmission through the university registrar's office. Readmission requests are processed as follows:

School of engineering students seeking readmission to the same program they left, and who left ASU with either academic good standing or probation status, are readmitted to the degree program they left with the same academic standing (i.e., good academic standing or probation) they had when they left ASU.
Students seeking readmission to an Ira A. Fulton Schools of Engineering program other than the program they left, and who have an ASU GPA of 3.00 or higher, are readmitted to the degree program with the same academic standing (i.e., good academic standing or probation) they had when they left ASU.
Students seeking readmission to an Ira A. Fulton School of Engineering program other than the program they were in when they left, and who left ASU with either academic good standing or probation status, and who have an ASU GPA less than 3.00 are subject to the admission by change of major process. These requests for readmission are reviewed on an individual basis. If the request for readmission is approved, the student is readmitted to the new degree program with the same academic standing (i.e., good academic standing or on probation) they had when they left ASU.
Students seeking readmission to an Ira A. Fulton Schools of Engineering program, and who left ASU with either ineligible or disqualified status, are subject to review by the office of Academic and Student Affairs and the program.
Readmission is only considered after a student has remained out of the Ira A. Fulton Schools of Engineering for a minimum of 12 months.
Students are required to supply proof that they are now capable of successfully completing courses in the discipline by the completion of at least 15 hours of appropriate course work with a GPA of 3.00 or higher and a cumulative (ASU + transfer) GPA of at least 2.50.
If the readmission request requires a change of major, then the admission by change of major review must be completed.
If readmission is approved, students will return with continued probation status in the appropriate degree program.
Once readmitted, returning students are required to meet with a program advisor before enrolling in courses at ASU.

## Other Special Requirements

Advancing to Upper-division Courses
The faculty in the Ira A. Fulton Schools of Engineering have identified a set of critical requirements in the first four semesters of each program whereby performance in these critical requirements is a key component in progressing in the chosen major. These critical requirements include a set of courses and performance levels required in those courses and are outlined on the major maps.

## Graduate Policies

Policy for Maintaining Satisfactory Progress
A student who has been admitted to a graduate degree program in the Ira A. Fulton Schools of Engineering, with either regular or provisional admission status, must maintain a 3.00 or higher GPA in all of the following:
All work taken for graduate credit (courses numbered 500 or higher).
Course work in the student's approved plan of study.
All course work taken at ASU (overall GPA) post-baccalaureate.
A. A student will be placed on academic probation if one or more of the student's GPAs listed above falls below 3.00 . Students will be notified by mail when placed on academic probation.
B. A student will earn academic good standing by obtaining a 3.00 or better in the GPAs listed above by the time the next nine hours are completed. Course work such as research and dissertation registration that are for "Z" (in progress) or "Y" (satisfactory) grade cannot be included in these nine hours.
C. A student may be recommended for withdrawal from a graduate program if the student fails to increase all of the GPAs listed above to 3.00 or better by the time he/she completes at least nine credit hours as defined in section B .
A student may appeal actions concerning withdrawal by petitioning the program in which they are enrolled.
Academic units in the Ira A. Fulton Schools of Engineering can expand this policy statement to include additional policy governing the satisfactory academic progress of the students in their graduate programs.
Additional Graduate Policies
Full details of policies related to graduate students in the Ira A. Fulton Schools of Engineering can be found on each program's Web page. For a list of programs, visit http://engineering.asu.edu [9]. University policies related to graduate students can be found at http://graduate.asu.edu [10].

Source URL: http://catalog.asu.edu/policies/engineering
Links:
[1] http://fulton.asu.edu/fulton/
[2] http://provost.asu.edu/academicintegrity
[3] http://engineering.asu.edu/advising
[4] http://eadvisor.asu.edu/
[5] http://engineering.asu.edu/students/standards
[6] http://catalog.asu.edu/ug_grad_req
[7] http://engineering.asu.edu/undergraduate/adreqs
[8] http://articulation.asu.edu/
[9] http://engineering.asu.edu/
[10] http://graduate.asu.edu/

## Honors - Barrett, the Honors College

Students who have demonstrated high levels of academic achievement in high school or college may apply for admission to Barrett. All candidates for admission must file an application to the college separate from their ASU application.
Applicants are evaluated on the basis of their high school GPA (Arizona Board of Regents GPA based on 16 competency courses), high school class rank and performance on the SAT or ACT; as well as talents that contribute to leadership and community service. Continuing ASU or transfer students are evaluated on their college GPA.
Application forms and additional information about the college and its activities are available by calling 480-965-2359 or by accessing the website at http://barretthonors.asu.edu [1].

## Undergraduate Policies

## Advising

Barrett students have advisors in their major, an assigned Barrett honors advisor, and Faculty Honors Advisors in departments throughout the university. Students are encouraged to stay in regular contact with all of these resources and are required to complete mandatory advising sessions with their Barrett honors advisor during semesters 1,3 , and 6 . To schedule an appointment with a Barrett honors advisor, call 480-965-9155. Office hours are Monday through Friday, 8 a.m. to 5 p.m. in Sage North 110.
Students can review honors opportunities in majors at http://barretthonors.asu.edu [1]. There are also special pre-law and prehealth advising opportunities for Barrett students. Contact the Barrett advising office for more information.

## Degree Requirements

## Barrett Academic Course Requirements

Honors students must maintain high standards of academic performance and show progress toward completion of graduation requirements in their disciplinary majors and in Barrett. In order to graduate from Barrett, students must complete the following (which includes a total of 36 credit hours of honors course work):
HON 171 and HON 272/273/274 The Human Event must be completed in sequence during a student's first two semesters in the college.
Thirty additional credit hours of honors course work must be earned with a letter grade of " $C$ " (2.00) or higher. This may include HON prefix classes, honors sections of classes, honors enrichment contracts or any automatic honors course such as ENG 105 (inperson sections), CHM 117, CHM 118, PHY 333, or any graduate-level course.
Included in the 36 credit hours of honors course work are 18 hours of upper-division or graduate-level honors credits for an earned letter grade of "C" (2.00) or higher, including six credit hours of honors course work outside the academic major. Students should investigate specialized honors upper-division tracks within their majors.
Students admitted as upper division transfer students (defined as 48 post-high school university credits completed by the time of planned enrollment in Barrett) must complete a three credit 300-level upper-division HON special topics course in addition to the 18 required hours of upper-division honors course work. Six of the 21 honors credits must be outside the academic major. A total of 21 hours of upper-division honors course work are required for these transfers because transfers do not have time to complete all 36 honors hours.
Students are required to complete an honors thesis/creative project for at least three credit hours, though students are encouraged to complete six thesis credit hours. The thesis credit hours may be included in the 18 required hours of upper-division honors course work. The honors thesis is launched with a prospectus form due one academic year before the defense. The final honors thesis copy must be filed by the posted deadline during the student's graduation semester.
ASU graduation requirements in an academic major must be met.
The student must maintain a cumulative ASU GPA of 3.25 or higher.
Barrett course requirements may be met in a variety of ways. There are two specific required courses for first year students. Only courses in which a student receives a grade of "C" (2.00) or higher may be used to meet Barrett requirements.
Those entering the college as lower-division students must take 18 lower-division honors credits, which include HON 171 and 272/273/274 The Human Event. This cross-disciplinary seminar acquaints students with ideas that form the foundation of a university education and emphasizes critical thinking, discussion and writing.

Those who enter as upper-division students must take 21 upper division honors credits, including a required three-credit, 300-level HON honors course. Junior-level seminar courses introduce students to critical thinking, discussion and writing in a topical area chosen by the instructor. It is expected that all students complete this course no later than the second semester after transferring. Departmental honors-only courses are limited to honors students and others who receive special permission from the instructor to enroll. Enrollment in these courses is limited. Compared to their nonhonors equivalents, these courses are designed to offer a richer, more complex intellectual experience appropriate to the discipline and the level of the course for all students enrolled. Other disciplinary honors courses group honors students in small cohorts to work on research projects of common interest.
Honors enrichment contracts are available in many departmental courses allowing honors students to contract with the instructor of designated nonhonors courses to earn honors credit by pursuing enrichment activities, which may include supplemental sessions with the instructor. Honors enrichment contracts must be filed during the first four weeks of class and completed during the semester in which the course is offered. Each contract form offers guidelines to aid students and faculty in developing appropriate contracts.
Course numbers listed in the online ASU schedule of classes as $298 / 492$ Honors Directed Study, 493 Honors Thesis, 497 Honors Colloquium and all classes with the HON prefix are reserved for students in Barrett and always count for honors credit. Students may receive credit for more than one of each of these courses in a given department.
Departmental courses with the number 493 are reserved for honors students completing their honors theses and creative projects. A student may enroll for these courses only with the approval of the sponsoring academic department and of the faculty member who serves as the student's thesis director. Course numbers listed in the online ASU schedule of classes as 493 fulfill the student's upper-division literacy and critical inquiry (L) General Studies requirement.
There are certain courses that carry automatic honors credit. These include ENG 105 (any in-person section), CHM 117, CHM 118, and PHY 333. Graduate level courses automatically earn honors credit.

Source URL: http://catalog.asu.edu/policies/barrett
Links:
[1] http://barretthonors.asu.edu/

## Journalism and Mass Communication, Walter Cronkite School of

The Walter Cronkite School of Journalism and Mass Communication recommends that students contact our Student Support Center at 602-496-5055 to obtain the most current information on college policies. The Cronkite school advising staff are available to assist with any questions regarding the school's policies.

## Undergraduate Policies

## Academic Integrity

Academic dishonesty in any form will not be tolerated in the Walter Cronkite School of Journalism and Mass Communication. The crux of our democracy is the ability of citizens to obtain honest, truthful and balanced information, and the credibility and integrity of the individual journalist and communications professional are crucial in that effort.
As the mission of the Cronkite school is to prepare students to become journalists and communication professionals, that credibility and integrity will be fostered within the educational environment of the school. To that end, a zero tolerance policy toward academic dishonesty will be enforced within every course and educational activity offered or sanctioned by the school.
Any allegations of academic dishonesty will automatically be referred to the Standards Committee of the school for review and recommendation to the dean of the school. If any student is found by the committee to have engaged in academic dishonesty in any form, including, but not limited to, cheating, plagiarizing and fabricating, that student shall receive a grade of XE for the class and will be dismissed from the Walter Cronkite School of Journalism and Mass Communication. Reinstatement will not be considered. There will be no exceptions.

## Advising

Students should follow the sequence of courses outlined on major maps, their online degree audits, and the advice of the school's academic advisors. Conscientious, careful planning and early advising are crucial to students who desire to progress through the program in a timely fashion. The critical requirements for freshmen in the school are available at http://cronkite.asu.edu [1].

## Graduate Policies

## Advising

Preadmission information, advising and continuing support are provided by the graduate student support specialist, who can be reached at 602-496-1796.
Maximum Time Limit

Master of Mass Communication students have six years to complete the program beginning with the date the first course in the program is taken.
Doctoral students have ten years to complete the program, beginning with the date the first course in the program is taken.

## Source URL: http://catalog.asu.edu/policies/journalism

Links:
[1] http://cronkite.asu.edu/
Law, Sandra Day O'Connor College of

## Graduate Policies

## Academic Integrity

Honor Code
The legal profession, a self-regulating association, depends on the integrity, honor and personal morality of each member. Similarly, the integrity and value of a Sandra Day O'Connor College of Law degree depends on a reputation for fair competition. The college's honor code is intended as a measure to preserve the integrity of the school's diploma and to create an arena in which students can compete fairly and confidently. Copies of the honor code are available from the college's Student Services Office.

## Academic Standing

Retention Standards
The College of Law requires a minimum grade point average of 73.00 or 2.00 to continue enrollment. If the grade point average falls below this number students may be disqualified following College of Law policies.
The College of Law Statement of Student Policies contains additional retention and academic policies. The Statement of Student Policies can be found at http://law.asu.edu [1].

## Advising

Academic assistance for currently enrolled law students is available through the office of the assistant dean for academic affairs.

## Admissions Process

The Sandra Day O'Connor College of Law enrolls only one first-year, JD class per year, and it enters in the fall semester. The program is a three-year program, and almost all students study on a full-time basis. The College does offer a flexible scheduling option for students with circumstances that make full-time enrollment impossible. To be considered for admission to the JD program, an applicant must:
Demonstrate that he or she will have earned an undergraduate degree from an accredited four-year college or university by the time of enrollment in the JD program.
Take the LSAT and provide a reportable score from that test.
Submit a completed application with application fee.
Submit transcripts and letters of recommendation through the Law School Admissions Council's Credential Assembly Service (CAS), which will be provided to the College of Law by LSAC with the applicant's LSAT record. Applicants are encouraged to apply electronically through www.Isac.org [2].
The undergraduate record and LSAT score are only two of many factors considered for admission.
More details about the application process can be found at http://www.law.asu.edu/admissions [3]. For an application to be considered timely, it must be postmarked or electronically submitted by Feb. 1. For earlier consideration, the early decision deadline is Nov. 1.

## Source URL: http://catalog.asu.edu/policies/law

Links:
[1] http://law.asu.edu/
[2] http://www.lsac.org/
[3] http://www.law.asu.edu/admissions

Letters and Sciences, School of

The School of Letters and Sciences provides students across ASU with the knowledge and skills to comprehend and effectively engage the changing world of the 21st century at local, national and global levels. The school offers graduate and undergraduate
degree programs that prepare students for a rapidly changing marketplace, as well as foundational instruction in humanities, social sciences, mathematics, sciences and professional fields.

## Undergraduate Policies

## Academic Standing

The standards for GPA and the terms of academic probation, disqualification, reinstatement and appeal are identical to those of the university as set forth under Retention and Academic Standards. When students are placed on probation, one of three things can happen:
The student may raise his or her cumulative GPA to academic good standing by taking new classes and be removed from academic probation after the fall or spring semester.
The student may receive the required semester GPA but not raise the cumulative GPA to academic good standing, in which case the student may continue on academic probation, earning the required semester GPA, for as many semesters as it takes to raise the cumulative GPA to academic good standing.
The student may fail to achieve the required semester GPA and be disqualified.

## Advising

All students are encouraged to seek advising before registration. Students must follow the calendar published in the Registration and Tuition Payment Guide each semester for information and deadlines pertaining to enrollment, adding/dropping classes and withdrawals.
In addition to information provided by an academic success specialist, students must read the requirements for university General Studies, college graduation, and major degree requirements in their edition of the ASU Academic Catalog. The ASU Academic Catalog is the governing source for all degree requirements.
Advising Locations
Advising offices are located at the Tempe, Downtown Phoenix, and Polytechnic campuses. Students should seek advising from the appropriate office as outlined below.

| Major | Advising Office Locations |
| :--- | :--- |
| English |  |
| History <br> Liberal Studies <br> Organizational Studies <br> Science, Technology and Society <br> Technical Communication <br>  <br>  <br>  <br> General Studies | Pholytechnic campus 480-727-1526 |
|  | Downtown Phoenix campus |
|  | UCENT Suite 300 |
|  | Phone: 480-727-1526 |
|  | Downtown Phoenix campus |
|  | UCENT Suite 300 |
|  | Phone: 602-496-4000 |
|  | Polytechnic campus |
|  | SANCA Second Floor |
|  | Phone: 480-727-1526 |
|  | Tempe campus |
|  | UASB First Floor |
|  | Phone: 480-965-4464 |
|  | West campus |
|  | FAB South Suite 101 |
|  | Phone: 602-543-9222 |

## Mandatory Advising

The following students in the School of Letters and Sciences must receive advising and must be cleared before registering for classes:
Students in their first semester at ASU.
Students on academic probation.
Students with a cumulative GPA of less than 2.00.
Students who have been readmitted to ASU.

Students who have been disqualified (these students are allowed to attend ASU summer sessions only and must be advised prior to registration).
Students who are "off track" in their major.
Students are encouraged to check their mandatory advising status each semester before attempting any registration transactions.

## Credit/Registration

Any student enrolling in courses offered by the School of Letters and Sciences is expected to follow the rules and deadlines specified in this catalog and the current Registration and Tuition Payment Guide. Students are encouraged to meet with their academic success specialists before registration.

## Degree Requirements

All candidates for graduation are required to complete at least 120 credit hours, of which at least 45 hours must consist of upperdivision courses. A minimum ASU cumulative GPA of 2.00 is required for graduation.
Course Load
Students enrolled in an undergraduate degree program in the School of Letters and Sciences may register for a maximum of 18 credit hours for fall or spring semesters and 14 credit hours for summer.
Appeals Procedures
Academic appeals and requests for variances or exceptions should be discussed first with the student's academic success specialist and then, if necessary, submitted in writing to the School of Letters and Sciences standards committee. The University Standards Committee also reviews all requests reviewed by the School of Letters and Sciences standards committee for exceptions to university requirements.

## Concurrent Degrees

Students who wish to obtain concurrent degrees must request approval from the School of Letters and Sciences and the college offering the second degree. Students who wish to obtain concurrent degrees may not double-count courses from one major to the next and must have at least 30 different credit hours in each major.

## Reinstatement/Readmission

For students who are disqualified, reinstatement to the School of Letters and Sciences is only granted for those that 1) raise their ASU cumulative GPA to good academic standing (see table below) by taking ASU summer classes, or 2 ) complete 12 or more transferable credits at another college or university with a GPA of 2.50 or higher and no grades lower than " C " (2.00).

| Total Hours Earned | Minimum Cumulative GPA |
| :--- | :--- |
| 24 or fewer | 1.60 |
| $25-55$ | 1.75 |
| 56 or more | 2.00 |

Source URL: http://catalog.asu.edu/policies/sls

## Liberal Arts and Sciences, College of

## Undergraduate Policies

## Academic Integrity

Academic honesty is expected of all students in all examinations, papers, laboratory work, academic transactions and records. The possible sanctions include, but are not limited to, appropriate grade penalties, loss of registration privileges, disqualification and dismissal. For more information, see http://provost.asu.edu/academicintegrity [1].

## Student Responsibilities

Any student enrolling in courses offered by the College of Liberal Arts and Sciences is expected to follow the rules and deadlines specified in this catalog and the current Registration and Tuition Payment Guide. Students are urged to meet with their departmental academic advisors before registration. Students with additional questions or problems are also urged to meet with advisors in the Office of Student and Academic Programs, in FULTN 110, regarding the academic rules of the college and the university.

## Academic Standing

The standards for GPA and the terms of academic probation, disqualification, reinstatement and appeal are identical to those of the university as set forth under Retention and Academic Standards, except that the disqualified student in the College of Liberal Arts and Sciences is suspended for at least two regular semesters at the university. When students are placed on probation, one of three things can happen:

The student may raise his or her cumulative GPA to academic good standing by repeating eligible classes or taking new classes and be removed from academic probation after the fall or spring semester.
The student may receive the required semester GPA, but not raise the cumulative GPA to academic good standing, in which case, the student may continue on academic probation, earning the required semester GPA, for as many semesters as it takes to raise the cumulative GPA to academic good standing.
The student may fail to achieve the required semester GPA and be disqualified.
Students who leave the university for a semester or more while on academic probation are not automatically readmitted. Such students, and all disqualified students, should contact the Office of Student and Academic Programs in FULTN 110, regarding procedures and guidance for reinstatement and returning to academic good standing. By following recommendations and meeting established standards for summer school work or course work at other institutions, the possibility of successful reinstatement is enhanced. All students who are academically disqualified or who are off track for two semesters should contact this office. The office provides transitional advising for students who must choose another major. Also available in this office is information on policies and procedures of the college on academic honesty, student grievances with respect to grades and various petitions regarding college standards and graduation requirements.

## Advising

All students are urged to seek advising in the appropriate college unit before registration. Students must follow the calendar published in the Registration and Tuition Payment Guide each semester for information and deadlines pertaining to enrollment, adding/dropping classes and withdrawals.
In addition to information provided by an advisor, students must read the requirements for university General Studies and college graduation in their edition of the ASU Academic Catalog. The ASU Academic Catalog is the governing source for all degree requirements. Students must consult the their major map for the major degree requirements.
Regular Advising
All students are strongly urged to seek advising in the appropriate college unit before registration.
eAdvisor
In fall 2007, ASU introduced eAdvisor, which gives students the tools to successfully follow their major map to graduation. eAdvisor assists students in
Learning more about graduation requirements for their major.
Discerning what critical-requirement courses and grades are required to stay on track to successfully complete their degree.
Planning for and scheduling appropriate courses in the correct sequence to maximize success.
Monitoring progress toward their degree.
Finding out how courses may fit into other majors if they decide to change majors.
Access eAdvisor at http://eadvisor.asu.edu/ [2].

## Advising Locations

College of Liberal Arts and Sciences students should seek routine advising in the department or school of their major.
The Office of Student and Academic Programs, in FULTN 110, is the central resource center for academic information in the college. Requests from students, departmental advisors and faculty for clarification of rules, procedures and advising needs of the college and university should be directed to that office.
Advising Holds
The following categories of liberal arts and sciences students must receive advising and must be cleared before their classes are scheduled:
Students in their first semester at ASU.
Students on academic probation.
Students with a cumulative GPA of less than 2.00.
Students in their first three semesters.
Students who have been disqualified (these students are allowed to attend ASU summer sessions only and must be advised in the Office of Student and Academic Programs in FULTN 110).
Students who have surpassed their 64th earned hour.
Students who are off track in their major.
Students in the above categories should consult an advisor in the department or school of their major (with the exception of disqualified students, who may only receive advising in the Office of Student and Academic Programs, FULTN 110). Students are encouraged to see if they have an advising hold each semester before attempting registration transactions.
Internships

All students are encouraged to complete at least one internship before graduation; some majors require internships. Many college disciplines have well-established internship programs, so students should begin by seeking information in their academic departments.
Advising for Preprofessional Programs
Special advising is available for students planning to enter the fields listed in the Advising for Preprofessional Programs table. The professional programs shown in the table are not majors in themselves; that is, there are no majors called "premedical," "prelaw," etc. In each program, the student must select an established major in the college or in one of the other colleges.

Advising for Preprofessional Programs

| Professional Field | Advisor Location |
| :--- | :--- |
| Dentistry | Pre-Professional Advising (PPAO), FULTN 135 |
| Foreign service | Diplomat in Residence, Amy J. Hyatt, COOR 6765 |
| Law | Pre-Professional Advising (PPAO), FULTN 135 |
| Medicine | Pre-Professional Advising (PPAO), FULTN 135 |
| Ministry | School of Historical, Philosophical and Religious Studies, COOR 3309 |
| Occupational therapy | Pre-Professional Advising (PPAO), FULTN 135 |
| Optometry | Pre-Professional Advising (PPAO), FULTN 135 |
| Osteopathy | Pre-Professional Advising (PPAO), FULTN 135 |
| Pharmacy | Pre-Professional Advising (PPAO), FULTN 135 |
| Physical therapy | Pre-Professional Advising (PPAO), FULTN 135 |
| Podiatry |  |

## Health Professions

Students pursuing admission to professional schools in the health professions must choose a major offered by ASU. However, specific courses must be taken to prepare the student to take the MCAT or other entrance examinations and to succeed in postbaccalaureate training. Therefore, students who plan to pursue a health profession should meet regularly with the staff in the PreProfessional Advising Office (PPAO) for guidance. While this guidance does not replace the need to meet with an advisor in the department of the student's major, health professions advising is a necessary supplement. To schedule a meeting with an advisor in the Pre-Professional Advising Office, located in FULTN 135, call 480-965-2365.
Pre-law
The American Bar Association does not recommend any specific major for students who wish to apply to law school upon graduation. ASU does not have a "prelaw" degree program. Therefore, students should select a major that interests them. Recent surveys of law school graduates indicate that students would be well advised to take one or two semesters of accounting as a supplement to their major curriculum. In addition, the American Bar Association recommends a variety of courses in the classics, economics and mathematical reasoning. Courses that engage the student in intense critical analysis and a substantial amount of writing are also recommended. As the student approaches the second semester of his or her junior year, the student should schedule a meeting with the prelaw advisor located in FULTN 135, by calling 480-965-2365.

## Credit/Registration

## Credit Requirement

All candidates for graduation in the Bachelor of Arts, Bachelor of Science or Bachelor of Science in Planning degree curricula are required to complete at least 120 credit hours, of which at least 45 hours must consist of upper-division courses. A minimum ASU cumulative GPA of 2.00 is required for graduation.

## Concurrent Degrees

Students who wish to obtain concurrent degrees must realize that there are certain combinations that would not be approved because there is too great an overlap between the courses required for each major. For example, students may not obtain concurrent degrees in two life sciences. Students who wish to obtain concurrent degrees may not double-count courses from one major to the next, but must have at least 30 different credit hours in each major.

## Minors

The College of Liberal Arts and Sciences offers minors in many of its disciplines. All minors must entail a minimum of 18 hours in the discipline with at least 12 of those hours as upper-division courses. Students should work with the advisor in the department of the minor to make certain they are making the most effective choices to complete their minors. Students may not use courses in their minors toward the major and, similarly, students may not use courses in the major to fill the requirements of the minor.
Additionally, there may be some disciplines that are too close in content for a student to choose a particular minor and major.

## Course Load

The normal course load is 15 or 16 credit hours. First-semester freshmen and entering transfer students are not permitted to register for more than 18 credit hours in the initial semester. Other students who wish to register for more than 18 hours must have a GPA of at least 3.40 and have completed a minimum of two semesters at ASU in which the student has completed 17 to 18 hours per semester. If a student meets these requirements, he or she make seek an overload for 19 to 21 hours from the advising office in the department of the major. Any petition for an overload in excess of 21 hours must be presented to the Office of Student and Academic Programs in FULTN 110. No student should assume that his or her petition for overload will be granted.
For summer sessions, the maximum course load is 14 credit hours, seven per 5 -week summer session. Overloads are rarely granted for these sessions and requests must be petitioned to the Office of Student and Academic Programs in FULTN 110.

## Pass/Fail Grade Option

The pass/fail grade option is intended to broaden the education of liberal arts and sciences undergraduates by encouraging them to take advanced courses outside their specialization. A grade of " $P$ " (pass) contributes to the student's earned hours but does not affect the GPA. A failing grade is computed into the GPA.
Only College of Liberal Arts and Sciences students with at least 60 credit hours may take courses under the pass/fail option. The option may be used under the following conditions:
Enrollment for pass/fail needs the approval of the instructor and the college.
Enrollment under this option must be indicated during registration and may not be changed after the late registration period.
A maximum of 12 hours taken for pass/fail may be counted toward graduation.
Students may not enroll under the pass/fail option in the following courses:
Those taken to satisfy the second language or first-year composition requirements.
Those in the student's major, minor or certificate program.
Those counted toward or required to supplement the major.
Those counted as 499 Individualized Instruction.
Those taken for honors credits.
Those counted toward satisfying the College of Liberal Arts and Sciences graduation requirements or the General Studies requirement.
Audit Grade Option
A student may choose to audit a course in which he or she attends regularly scheduled class sessions but earns no credit. The student should obtain the instructor's approval before registering for the course.
Note: This grade option may not be changed after the drop/add period.

## Degree Requirements

College Graduation Requirements
All students in the College of Liberal Arts and Sciences must complete the university General Studies requirement as well as all requirements in the major. In addition, the college has established requirements that are specific to the Bachelor of Arts, Bachelor of Science and Bachelor of Science in Planning degrees.
A. Bachelor of Arts Degrees. Students pursuing Bachelor of Arts degrees in the college must demonstrate intermediate proficiency in a second language by completing the courses specified below with a grade of " $C$ " $(2.00)$ or higher in each course. Second-language course requirements may be fulfilled in one of the following ways:
Completion of second language course work at the intermediate level (202 or equivalent). Those students completing this requirement in Ancient Greek must take both GRK 301 and 302; students completing the requirement in Portuguese or Romanian must complete POR 314 or ROM 314.
A foreign language course at the 300 level or higher taught in the foreign language and having 202 or its equivalent as a prerequisite. Demonstrated completion of secondary education at a school in which the language of instruction is not English.

## Completion of SHS 202 American Sign Language IV or its equivalent.

B. Bachelor of Science degrees. Students pursuing Bachelor of Science and Bachelor of Science in Planning degrees in the college must complete six credit hours (two courses) of "Science and Society" courses. Students should consult with an advisor in the department or school of their major for a list of appropriate courses. The current list of Science and Society courses is also listed on the college's website at http://clas.asu.edu/scienceandsociety [3].
C. All students are required to take a minimum of MAT 119 or higher. A grade of " $C$ " $(2.00)$ or higher must be earned in the chosen mathematics course.
D. All students admitted as first-time freshmen are required to complete a freshman success course or first-year seminar. These courses are designed to introduce students to the College and help them gain an understanding of what they will need to be a successful student at ASU. Topics include academic success, academic integrity, and student engagement.

Major Requirements
Each student is required to select a major from among the fields of study offered by the College of Liberal Arts and Sciences. The requirements for completion of the major are described under departmental listings.
A. The major department may require up to 45 credit hours of course work. The minimum is 30 hours. A maximum of 15 additional hours may be required in related courses and prerequisites. No more than 60 credit hours of course work may be required to complete the major, related courses and prerequisites. Some departments require calculus-level mathematics; up to five of these credit hours may be excluded from the 60-hour maximum because they satisfy the mathematics proficiency requirement. A minimum of 12 upper-division hours in the major must be taken in residence.
B. No credit is granted toward fulfilling major or minor requirements in any upper-division course in that subject field unless the grade in that course is at least a " $C$ " (2.00). In the College of Liberal Arts and Sciences, the assignment of a grade of " $\gamma$ " (satisfactory) indicates a level of performance that would have resulted in a grade of at least "C" (2.00) had the normal grading scheme been used.

See the individual departments for other minimum grade requirements.
C. Major fields of study are classified into the following three areas:

Humanities
Asia Studies.
Asian Languages (Chinese/Japanese).
English.
Film and Media Studies.
French.
German.
History.
International Letters and Cultures.
Italian.
Jewish Studies
Philosophy.
Religious Studies.
Russian.
Spanish
Natural Sciences and Mathematics
Biochemistry.
Biological Sciences.
Chemistry.
Computational Mathematical Studies.
Earth and Environmental Sciences.
Earth and Space Exploration.
Mathematics.
Microbiology.
Molecular Bioscience/Biotechnology.
Physics.
Psychology.
Speech and Hearing Science.
Social Sciences

African and African American Studies.
American Indian Studies.
Anthropology.
Applied Mathematics for the Life and Social Sciences.
Asian Pacific American Studies.
Communication.
Economics.
Family and Human Development.
Geography.
Global Health.
Global Studies.
Justice Studies.
Political Science.
Sociology.
Transborder Chicana/o and Latina/o Studies.

## Urban Planning.

Women and Gender Studies.
General Electives
Most Liberal Arts and Sciences majors can meet all of the above requirements with fewer than the 120 credit hours required for graduation. Remaining hours are general electives that may be selected from any of the departments of the College of Liberal Arts and Sciences and from the offerings of the other colleges.

## Reinstatement/Readmission

Students who were academically disqualified from the university must earn readmission to the College of Liberal Arts and Sciences. That process most generally entails taking a minimum of 12 credit hours of courses that are pre-approved by the Office of Student and Academic Programs at a community college, earning a minimum 3.00 GPA while not receiving any grade lower than a "C" (2.00). In order to learn what is required of the individual, students must schedule an appointment by calling 480-965-6506. Enrolling and completing courses not pre-approved by the Office of Student and Academic Programs may result in a denial of readmission to the college, no matter how well the student has performed.
Students who were additionally off track for two semesters and who were disqualified from the university or who left on probation, will not be able to be readmitted to their former majors, but must choose another major for which to attempt to earn reinstatement. For more information, call 480-965-6506.

## Other Special Requirements

Some of the major degree programs offered by the College of Liberal Arts and Sciences require the student to complete a portfolio process before being admitted to take upper division classes in the major. Students should check with the department or school of their major to see if there are any such policies that apply to them.

Source URL: http://catalog.asu.edu/policies/liberal arts
Links:
[1] http://provost.asu.edu/academicintegrity
[2] http://eadvisor.asu.edu/
[3] http://clas.asu.edu/node/204

## New College of Interdisciplinary Arts and Sciences Policies

## Undergraduate Policies

## Degree Requirements

All candidates for graduation in the B.A. and B.S. curricula are required to present at least 120 credit hours, of which at least 45 credit hours must consist of upper-division courses. A minimum cumulative GPA of 2.00 is required for graduation.
It is the student's responsibility to be aware of the requirements for their degree program and to select courses accordingly.
To graduate, a student must satisfy three requirements:
College proficiency requirements for language and cultures, and mathematics.
University first-year composition and General Studies requirements.

Major requirements that involve concentrated course work in one program.
Proficiency Requirements
Each student is required to demonstrate proficiency in the analysis of language and cultures and mathematics by passing an examination or by completing the courses specified below with a grade of " $C$ " (2.00) or higher in each course.
Students considering graduate work after completion of a bachelor's degree should consult with faculty advisors regarding language requirements in their intended areas of study.
Language and Cultures
This requirement may be satisfied through one of the following:
Completion of secondary education at a school in which the language of instruction is not English.
Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV.
Completion of upper-division course(s) taught in a foreign language, taken in the United States or the relevant country.
Completion of six credit hours of upper-division courses that have a global awareness (G) or cultural diversity in the U.S. (C)
designation, in addition to the courses used to meet the University General Studies requirements.
Completion of two sequential semesters of course work in a current computer language. Contact the college advising office for information on applicable course work.
Mathematics
MAT 142 or any MAT course for which MAT 117 or a higher-level MAT course is a prerequisite.
Major Requirements
Each student is required to select a major from among the programs offered by the New College of Interdisciplinary Arts and Sciences.
The major program may require up to 45 credit hours of course work. The minimum is 30 hours. A maximum of 18 additional hours may be required in related courses and prerequisites. No more than 63 credit hours of course work may be required to complete the major, related courses and prerequisites.
No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject field of the major unless the grade in that course is at least a " $C$ " (2.00). Normally a " $Y$ " (satisfactory) grade needs confirmation that it is equivalent to a "C" (2.00) or higher.
General Electives
After the three requirements have been satisfied, the remainder of the minimum 120 credit hours required for graduation are general electives. Contact college advisors for assistance in selecting elective courses.

Source URL: http://catalog.asu.edu/policies/new college

## Nursing and Health Innovation, College of

The College of Nursing and Health Innovation recommends that students contact the Student Services Office at 602-496-0888 to obtain the most current information on college policies. Because of changing resources regarding clinical experiences, the criteria used to determine how spaces will be assigned in the traditional pre-licensure clinical nursing program are subject to change.

## Undergraduate Policies

## Academic Integrity

Academic honesty is expected of all students in all examinations, papers, academic transactions and records. The possible sanctions include, but are not limited to, appropriate grade penalties, loss of registration privileges, disqualification and dismissal. The College of Nursing and Health Innovation adheres to the Student Code of Conduct regarding academic dishonesty. A copy of the Student Code of Conduct may be obtained online at http://provost.asu.edu/academicintegrity [1]. Academic dishonesty is not tolerated in any course and is subject to specific College of Nursing and Health Innovation policies and procedures.
Review the College of Nursing and Health innovation Undergraduate Student Handbooks (https://nursingandhealth.asu.edu/students/forms [2]) for additional information regarding College policies.

## Academic Standing

University standards for academic good standing and Sun Devil Tracking are followed for all majors in the College. Students who do not maintain the minimum GPA after each fall or spring semester are placed on academic probation. Students on academic probation or continuing probation must meet with an academic advisor before registration for the subsequent semester. Students placed on academic probation have one semester to raise the cumulative or semester GPA to meet the academic good standing criteria; otherwise, these students may be disqualified or determined to be ineligible for some majors in this College. Disqualified students are not permitted to enroll for the fall or spring semesters.

Sun Devil Tracking focuses on students who initially enroll as full-time freshmen and tracks progress during their first four semesters. It identifies and outlines the critical courses, GPA requirements and milestones that predict success in each major. Students use major maps and progress reports to plan what courses to take each semester.
Students who do not meet critical requirements are notified that they are off track and off track status is displayed on My ASU student pages. Off track students are required to see an academic advisor before registering for or adding classes. Students off track for two consecutive semesters may be required to change majors.
Students pursuing the R.N. - B.S.N. program or the Bachelor of Applied Science degrees are not critically tracked. See major maps for all college majors at (https://webapp4.asu.edu/programs/t5/programs/College/CNU/undergrad/false [3].

## Advising

Academic advising is provided by the College of Nursing and Health Innovation through the Undergraduate Student Academic Services Office (USASO) and the graduate programs offices and it is an essential aspect of the educational experience. Academic advisors assist students with program planning, registration, preparation of petitions, verification of graduation requirements, referrals to university and community resources, and career planning. ASU accepts course work transferred from other accredited institutions and then the College of Nursing and Health Innovation determines if and how the courses will be applied.
The Undergraduate Student Academic Services Office (USASO) is committed to ensuring that students reach their academic goals and graduate in four years by monitoring student progress [4], providing academic resources [5], and using personalized tools [6] to advise students and help ensure they get off to a good start and stay on track towards graduation.
Student responsibilities include following university guidelines regarding submission of transcripts from all colleges other than ASU, obtaining the necessary signatures or computer verifications required by the university and following university procedures for matriculation. It is ultimately the responsibility of each student to fulfill academic and program requirements.
Mandatory Advising: All freshmen and new undergraduate transfer students are required to meet with an academic advisor before registering for courses. Students with academic probationary status and off-track students are required to meet with an academic advisor to plan strategies for improving academic standing. Students interested in transferring to the pre-licensure nursing program must attend a BSN Information Session before a one-on-one academic advising appointment will be scheduled
(https://nursingandhealth.asu.edu/students/info-bsn.htm [7]).

## Credit/Registration

Course Load: Students wishing to register for more than the maximum allowable credits in a term must petition the standards
committee and must obtain an approved overload before registration (https://nursingandhealth.asu.edu/node/775 [8]). All prerequisite courses for the pre-licensure nursing major major must be taken for a letter grade. All upper division nursing courses will be taken for a grade except for selected clinical courses in the prelicensure program that are taken for " P " (pass) or " Y " (satisfactory).

## Degree Requirements

Students wishing to pursue concurrent degrees must petition the College of Nursing and Health Innovation and the college of the other major they wish to pursue.
Admission standards for Exercise and Wellness, Health Sciences, Medical Lab Sciences, Nutrition and the online R.N. to B.S.N. program are the same as university admission requirements (http://students.asu.edu/admission [9]). Admission requirements to kinesiology and the traditional pre-licensure clinical nursing program are more rigorous.
Admission to nursing: Applicants who have an associate's degree in nursing, or a nursing diploma, and have or will soon have their R.N. license apply to the online R.N. to B.S.N. program. Applicants who do not have an associate's degree in nursing or a nursing diploma and do not have their R.N. license will apply to the traditional pre-licensure clinical nursing program and must meet more rigorous admission criteria. While not required for admission, at least one year of high school chemistry and one year of high school biology are recommended. Choosing a second choice major is optional but recommended. Applications will be evaluated based on the requirements for the majors chosen in order of preference. The priority deadline for consideration for the traditional prelicensure clinical nursing program is Feb. 15.
Test of English as a Foreign Language (TOEFL): The TOEFL requirements for the traditional pre-licensure clinical nursing program are more stringent than the requirements for admission to ASU. Applicants whose native language is not English (identified by the U.S. Department of State Bureau of Public Affairs) must provide evidence of English language proficiency. The English proficiency requirement may be fulfilled by meeting one of the following: minimum score of 550 (paper-based), 213 (computer-based), or 79 (internet-based) on the TOEFL.
When ready to begin the upper-division, traditional pre-licensure clinical nursing course work, students will be asked to state their preferred semester start date and campus location—downtown Phoenix or Mayo Clinic Hospital. Semester start date may not be the first semester the student is eligible and campus assignment is made by the college. Students must complete the program on the campus assigned.
If there are available seats in the traditional pre-licensure clinical nursing program after placing admitted nursing students, a Competitive Application Process (CAP) process will be used to fill those spaces. Spaces will be given to those students with the highest advancement score.

Competitive Application Process (CAP)
Choose a major in the College (Exercise and Wellness, Health Sciences, Kinesiology, Nutrition).
Take nursing prerequisites as well as courses toward the other major chosen
Achieve a minimum of 3.25 Prerequisite/Critical Course GPA.
Achieve a minimum of 3.25 Select GPA (13 of 17 courses including first-year composition and three sciences from BIO 201, BIO 202, CHM 101, MIC 205/206).
TEAS score of 58.7 percent or higher.
Submit application and supporting documents (Valid, Unrestricted Fingerprint Clearance Card; CPR/BLS card, immunizations, etc.).
Priority may be given to students who complete a majority of the prerequisite courses at ASU. A Select GPA will be calculated based on the prerequisite courses. Students in the upper-division clinical nursing courses must earn grades of "C" (2.00) or higher in all nursing course work except in nursing practice courses where a designation of a " $Y$ " (satisfactory) or "P" (pass) grade is required. In addition, students are allowed only one nursing course failure (i.e., grade below "C"). The second failure in a nursing course will result in disqualification from the nursing major.
The four-term, upper-division clinical nursing program is available in two delivery options, 1) the 24-month option with classes scheduled during the fall and spring semesters on the Downtown Phoenix campus, and no summer enrollment is required, or 2) the 16-month year-round option with classes scheduled during fall, spring and summer sessions on the Downtown Phoenix campus and the Mayo Clinic Hospital campus, summer tuition rates apply.
Students will be asked to state their preferred campus location, if more than one site is available, but campus assignment is made by the college. Students must complete the program on the campus assigned.
Essential Functions: Students in the traditional pre-licensure clinical nursing courses are expected to meet the essential functional abilities of the undergraduate nursing student. Essential functions for this program include gathering data through the senses (hearing, seeing, etc.), synthesizing information from a variety of sources, making decisions regarding patient care and performing necessary physical and mental activities to ensure safe care. If a student needs more information about how the Americans with Disabilities Act applies to the essential function requirements, contact the Disability Resource Center
(http://www.asu.edu/studentaffairs/ed/drc/ [10]). Some clinical experiences may require students to purchase their own protective devices. For complete details, call the Baccalaureate Programs Office
(https://nursingandhealth.asu.edu/programs/nursing/undergraduate/bsn/contact.htm [11]).
Arizona State Board of Nursing Requirement: Once students have earned the Bachelor of Science in Nursing (BSN) they must pass a national licensing examination, known as the NCLEX-RN, in order to obtain a nursing license. Arizona State law prohibits an individual convicted of a felony from applying for nursing licensure or certification until five years after the date of absolute discharge of the sentence. Application for, and passage of, the NCLEX-RN is the sole responsibility of the student.
Transferring into the Traditional Pre-Licensure Clinical Nursing Program with Advanced Standing: Because of the preference given to students taking prerequisite courses at ASU, it is highly unlikely that students who have completed one or more semesters in an upper-division, accredited, baccalaureate school of nursing will be able to secure a space in the traditional pre-licensure clinical nursing program in the college.

## Reinstatement/Readmission

Disqualified or ineligible students who have skipped a fall or spring semester must follow the procedures for readmission. See Readmission to the University at http://students.asu.edu/readmission [12].
Applications for reinstatement/readmission to nursing or to kinesiology are subject to rigorous requirements that reflect admission and progression standards. This might include summer or winter course work at ASU to bring the cumulative ASU GPA to a 3.50 or higher or taking specified courses at another institution and earning a 3.50 or higher.
Applications for reinstatement/readmission to the other majors in the college will normally require summer or winter enrollment to bring the ASU cumulative GPA to a 2.0 or higher or taking specified course work at another institution and earning a 2.50 or higher.

## Other Special Requirements

Students in some programs, including but not limited to the traditional pre-licensure clinical nursing program and Medical Lab Sciences, that require working in hospitals or with vulnerable populations, must meet additional requirements as follows.
Immunizations
Tetanus/Diphtheria (Td, Tdap, or DT): Proof of an immunization for tetanus/diphtheria within the last 10 years.
Negative TB Skin Test: Proof of a negative TB skin test that will be current at the beginning of the first semester of clinical courses. If skin test is positive, provision of a chest x-ray or of follow-up treatment. Negative TB skin test or evidence of follow-up treatment is required throughout the enrollment in clinical course work.
Measles (Rubeola), Mumps and Rubella (MMR): Students must provide proof of immunity through either: two MMR Immunizations with the second given after 12/31/79; one MMR Immunization and two positive titers for Rubella and Rubeola; three positive titers for Rubeola, Mumps, and Rubella. Note: ASU requires proof of MMR immunization for admissions purposes.

Varicella (Chicken Pox): Two vaccinations are required for Varicella. Students may fulfill the requirement by providing proof of completion of the Varicella vaccines, or a Varicella titer with positive results.
Hepatitis B: Students must provide proof of immunity through documentation of 3 doses of Hepatitis B or positive titer results. Students may not participate in any clinical experience without meeting these requirements. An annual flu vaccine is also recommended; other health information may be required.
Professional Liability Insurance: It is highly recommended that students carry their own professional liability insurance when enrolled in clinical nursing courses.
Health and Accident Insurance: It is strongly recommended that all students carry their own health and accident insurance. Some clinical agencies require students to have current health insurance. See the baccalaureate programs student handbook. Each student is personally responsible for costs related to any accident or illness during or outside of school activities.

Automobile Insurance: Extensive travel may be required for selected clinical experiences. Students are responsible for transportation to and from clinical sites. If driving their own vehicles, students are required by state law to carry automobile insurance.
The College of Nursing and Health Innovation Standards committee is currently revising clinical standards related to background clearance and the requirement for titers to demonstrate immunity to particular diseases. Current and incoming students will be notified of the new requirements once they are approved.

## Graduate Policies

Academic Advising: Graduate students are advised by the Graduate Programs Office of the college. Upon admission, each student is assigned a faculty advisor within the area of concentration.

## Source URL: http://catalog.asu.edu/policies/nursing

Links:
[1] http://provost.asu.edu/academicintegrity
[2] https://nursingandhealth.asu.edu/students/forms
[3] https://webapp4.asu.edu/programs/t5/programs/College/CNU/undergrad/false
[4] http://eadvisor.asu.edu/whatiseadvisor/tracking
[5] http://eadvisor.asu.edu/node/19
[6] http://eadvisor.asu.edu/whatiseadvisor/tools
[7] https://nursingandhealth.asu.edu/students/info-bsn.htm
[8] https://nursingandhealth.asu.edu/node/775
[9] http://students.asu.edu/undergraduate-admission
[10] http://www.asu.edu/studentaffairs/ed/drc/
[11] https://nursingandhealth.asu.edu/programs/nursing/undergraduate/bsn/contact.htm
[12] http://students.asu.edu/readmission

## Nutrition and Health Promotion, School of

The School of Nutrition and Health Promotion recommends that students contact the Academic Services Office at 602-496-2400 to obtain the most current information on School policies.

## Undergraduate Policies

## Academic Integrity

Academic honesty is expected of all students in all examinations, papers, academic transactions and records. The possible sanctions include, but are not limited to, appropriate grade penalties, loss of registration privileges, disqualification and dismissal. The School of Nutrition and Health Promotion adheres to the Student Code of Conduct regarding academic dishonesty. A copy of the Student Code of Conduct may be obtained online at http://provost.asu.edu/academicintegrity. Academic dishonesty is not tolerated in any course and is subject to specific School of Nutrition and Health Promotion policies and procedures.

## Academic Standing

University standards for academic good standing and Sun Devil Tracking are followed for all majors in the School with the exception of those in the BS in Kinesiology Program, which maintains stricter admission and retention standards. Additional information regarding the academic requirements for Kinesiology students can be obtained from a Kinesiology Academic Advisor. Students who do not maintain the minimum GPA after each fall or spring semester are placed on academic probation. Students on academic probation or continuing probation must meet with an academic advisor before registration for the subsequent semester. Students placed on academic probation have one semester to raise the cumulative or semester GPA to meet the academic good standing criteria; otherwise, these students may be disqualified or determined to be ineligible for some majors in this College. Disqualified students are not permitted to enroll for the fall or spring semesters.

Sun Devil Tracking focuses on students who initially enroll as full-time freshmen and tracks progress during their first four semesters. It identifies and outlines the critical courses, GPA requirements and milestones that predict success in each major. Students use major maps and progress reports to plan what courses to take each semester.
Students who do not meet critical requirements are notified that they are off track and off track status is displayed on My ASU student pages. Off track students are required to see an academic advisor before registering for or adding classes. Students off track for two consecutive semesters may be required to change majors.

## Advising

Academic advising is provided by the School of Nutrition and Health Promotion through the Undergraduate Academic Services Office as an essential aspect of the educational experience. Advising for graduate students occurs within the student's specific academic program. Academic advisors assist undergraduate students with program planning, registration, preparation of petitions, verification of graduation requirements, referrals to university and community resources, and career planning. ASU accepts course work transferred from other accredited institutions and then the School of Nutrition and Health Promotion determines if and how the courses will be applied.
The Academic Services Office is committed to ensuring that students reach their academic goals and graduate in four years by monitoring student progress, providing academic resources, and using personalized tools to advise students and help ensure they get off to a good start and stay on track towards graduation.
Student responsibilities include following university guidelines regarding submission of transcripts from all colleges other than ASU, obtaining the necessary signatures or computer verifications required by the university and following university procedures for matriculation. It is ultimately the responsibility of each student to fulfill academic and program requirements.
Mandatory Advising: All freshmen and new undergraduate transfer students are required to meet with an academic advisor before registering for courses. Students with academic probationary status and off-track students are required to meet with an academic advisor to plan strategies for improving academic standing.
Course Load: Students wishing to register for more than the maximum allowable credits in a term must petition to do so through their academic advisor and must obtain an approved overload before registration.

## Degree Requirements

Students wishing to pursue concurrent degrees must petition the School of Nutrition and Health Promotion and the college of the other major they wish to pursue.
Admission standards for Exercise and Wellness, Health Sciences, Medical Lab Sciences, and Nutrition programs are the same as university admission requirements (http://students.asu.edu/admission). Admission requirements to kinesiology program are more rigorous and be obtained from a Kinesiology academic advisor.

## Reinstatement/Readmission

Disqualified or ineligible students who have skipped a fall or spring semester must follow the procedures for readmission. See Readmission to the University at http://students.asu.edu/readmission.
Applications for reinstatement/readmission to kinesiology are subject to rigorous requirements that reflect current admission and progression standards. This might include summer course work at ASU or taking specified courses at another institution in order to achieve the desired GPA.
Applications for reinstatement/readmission to the other majors in the School will normally require summer enrollment to bring the ASU cumulative GPA to a 2.0 or higher or taking specified course work at another institution and earning a 2.50 or higher.

## Other Special Requirements

Students in some programs, including but not limited to the Medical Laboratory Science, that require working in hospitals or with vulnerable populations, must meet additional requirements such as specific immunizations, background clearance, and/or proof of insurance.

## Graduate Policies

Academic Advising: Graduate students are advised by the a faculty advisor within the area of concentration.

## Public Programs, College of

## Undergraduate Policies

## Academic Standing

Students in the College of Public Programs are considered to be in good standing for the purpose of retention if they maintain a cumulative GPA of 2.00 or higher in all courses taken at ASU. Each major within the College of Public Programs requires a progessively higher GPA than a 2.00 as a student advances towards their degree. These requirements are outlined in the student's major map.
Probation
Any student who does not maintain good standing is placed on academic probation. A student on academic probation is required to observe any limitations or rules the college may impose as a condition for retention.
Disqualification

A student who is on probation becomes disqualified if:
The student has not returned to good standing.
The student has not met the required semester GPA.
Disqualification is exercised at the discretion of the college and becomes effective on the first day of the fall or spring semester following college action. A disqualified student is notified by the Office of the Registrar or the dean of the college and is not allowed to register for a fall or spring semester at the university until reinstated. A student who is disqualified may not attend as a nondegree student.

## Advising

The following categories of students are required to receive advising and to be cleared by a program advisor before they may register for classes:
Students with admissions competency deficiencies.

## All freshmen.

Transfer students in their first semester at ASU.
Readmitted students.
Students on probation.
Students who have been disqualified.
Students with special admissions status.
All students majoring in Social Work.

## Credit/Registration

## Course Load

A normal course load per semester is 15 or 16 credit hours. The maximum number of hours for which a student can register is 18 credit hours unless an overload petition has been filed and approved by the department/school standards committee and the academic and student affairs committee of the college. Semester course loads may be further limited for students in mandatory advising. Petitions for overload are not ordinarily approved for students who have a cumulative GPA less than 3.00 and who do not state valid reasons for the need to register for the credits. Students who register for credit hours in excess of 18 and do not have an approved overload petition on file may have courses randomly removed through an "administrative drop" action. Specific degree requirements are explained in detail under the respective college, school and department sections.

## Reinstatement/Readmission

Students seeking reinstatement after disqualification should contact the College of Public Programs student services office regarding procedures and guidance for returning to good standing. When reinstatement includes readmission, application must be made to the readmissions section of the University Registrar. All academic disciplinary action is the function of the College of Public Programs student services office, UCENT 650, under the direction of the dean of the college. Students having academic problems should call this office for advising at 602-496-0600.
The mission of the College of Public Programs professional academic advising staff is to assist students in developing meaningful educational plans to meet their academic, career and personal goals in an ongoing process of evaluation and clarification. The advisors strive to perform their duties in a professional, ethical, confidential, accurate and supportive manner, respecting student diversity and needs and always holding the individual in highest regard. The student and advisor should accomplish this process in a spirit of shared responsibility to develop academic excellence, strong decision-making skills and self-reliance. A student who has been admitted to the College of Public Programs is assigned an academic advisor from the academic unit of the student's major area of study. Questions about advising should be directed to the student's academic advisor or to the College of Public Programs Student Services Office, UCENT 600.

## Other Special Requirements

Interdisciplinary Public Service Requirement
The College of Public Programs has a college-level graduation requirement for all undergraduate students majoring within the college. This degree requirement is called the Interdisciplinary Public Service requirement. Each student must complete 13 hours of public programs course work. These 13 hours will consist of courses from other public programs degrees within the College of Public Programs and ASU 101. Students may choose a core course from their major and three courses from the approved course list for this requirement in addition to completing ASU 101. ASU 101 must be completed in the first year at ASU; the other courses can be taken while completing the degree. The approved course list is available through your major advisor. All 13 hours must be completed in order for an undergraduate student to graduate from the College of Public Programs. Questions about this requirement should be directed to your academic advisor for your major.
Graduate Policies
Advising

Advising is usually handled by graduate faculty or a committee. Once admitted, students are typically assigned a temporary faculty advisor in the potential areas of specialization who assists in planning a course of study. For those degree programs requiring the completion of a thesis, a chair and thesis supervisory committee are selected by the director of graduate studies, in consultation with the student, and appointed by the dean of the Graduate College.

Source URL: http://catalog.asu.edu/policies/public programs

## Sustainability, School of

## Undergraduate Policies

## Academic Standing

Student Responsibilities
Students need to make many decisions as they complete their degrees. While the school and the university have a number of resources available (e.g., faculty, courses, advisors, and tutors) to help in making the decisions, students are expected to take responsibility for their decisions.
Good Standing
Students in the School of Sustainability are considered in good standing for the purpose of retention if 1) they maintain a cumulative GPA of 2.00 or higher in all courses taken at ASU, and 2) maintain critical requirements within their major.
Critical Requirements
All sustainability students must meet the critical requirements for their intended majors. Students who do not comply with the critical requirements are off track and have holds placed on their records. These students have to meet with an advisor to have this hold removed. If the student still has not met all critical requirements in the following semester, then further registration in the intended major may not be permitted.

## Probation

Any student who does not maintain a cumulative GPA of 2.00 or higher in all courses taken at ASU is placed on academic probation. Probation status for academic reasons begins on the first day of classes of the semester after the semester in which a student has been determined to be on probation. A student on academic probation is required to observe any limitations or rules the school may impose as a condition for retention. Before students on probation can register for classes in the next semester, they must receive advising in their department.

## Disqualification

Students who do not meet probation requirements are subject to disqualification. A disqualified student will not be able to register for classes in the fall or spring semester at the university. If the student has already registered for a future fall or spring semester, the registration is canceled. A student who has been disqualified may apply for reinstatement through the school.

## Advising

The School of Sustainability's Academic Advising Center assists undergraduate and graduate students in achieving their personal, educational, cultural and career goals while becoming self directed, life-long learners. The School encourages continuing students to meet with an advisor at least once each semester. New students will be required to meet with an advisor before being cleared to register for classes. Office hours are Monday-Friday (excluding university holidays), 9 a.m. to 4 p.m. Students should call in advance (480-727-6963) to make an appointment so advisors can set aside the appropriate time to answer all their questions.

## Degree Requirements

School Graduation Requirements
All students in the School of Sustainability must complete the university General Studies requirement as well as all requirements in the major. In addition, the school has established requirements that are specific to the B.A. and B.S. degrees.
ASU 101 Requirement: ASU 101-SOS: The ASU Experience. (1)
Statistics Requirement: STP 226 Elements of Statistics, CS (3) or additional statistics course options as approved by the school.
Foreign Language Requirement.

## Foreign Language Requirement

Bachelor of Arts: Students pursuing B.A. degrees in the School of Sustainability must demonstrate intermediate proficiency in a second language by completing the courses specified below with a grade of "C" (2.00) or higher in each course. Second language course requirements may be fulfilled by one of the following:
Completion of second language course work at the intermediate level (202 or equivalent; those students completing this requirement in Ancient Greek must take both GRK 301 and 302; students completing the requirement in Portuguese or Romanian must complete POR 314 or ROM 314).
A foreign language course at the 300 level or higher taught in the foreign language and having 202 or its equivalent as a prerequisite.

Completion of secondary education at a school in which the language of instruction was not English.
Bachelor of Science: Students pursuing B.S. degrees in the School of Sustainability must demonstrate intermediate proficiency in a second language by completing the courses specified below with a grade of "C" (2.00) or higher in each course. Second language course requirements may be fulfilled by one of the following:
Completion of second language course work at the introductory level (102 or equivalent).
A foreign language course at the 200 level or higher taught in the foreign language and having 102 or its equivalent as a prerequisite.
Completion of secondary education at a school in which the language of instruction is not English.
The School of Sustainability also requires a cumulative 2.50 GPA in all major courses in order to graduate with a B.A. or B.S. in sustainability.

## Concurrent Degrees

Students who wish to obtain concurrent degrees must realize that there are certain combinations that would not be approved because there is too great an overlap between the courses required for each major. For example, students may not pursue both a B.A. or B.S. in sustainability as well as a B.A. in business with a concentration in sustainability.

## Reinstatement/Readmission

Students seeking reinstatement (after disqualification) or readmission (after absence from the university) should contact the School of Sustainability office regarding procedures and guidance for returning to good standing. When reinstatement includes readmission, application must be made to the readmission section of the Office of the Registrar.

## Graduate Policies

Graduate students should refer to the School of Sustainability Graduate Handbook at http://schoolofsustainability.asu.edu/currentstudents/graduate/index.php [1] for information about graduate policies and academic standards.
Please contact the school for more information at http://schoolofsustainability.asu.edu/ [2].

Source URL: http://catalog.asu.edu/policies/sustainability
Links:
[1] http://schoolofsustainability.asu.edu/current-students/graduate/index.php
[2] http://schoolofsustainability.asu.edu/

## Teachers College, Mary Lou Fulton

The Mary Lou Fulton Teachers College offers flexible and innovative programs at graduate and undergraduate levels to prepare teachers, educational leaders, and education researchers. The college emphasizes learning at preK-12 school sites for initial teacher certification. In addition, advanced graduate training in education fields leads to master's and doctoral degrees. Programs are offered at all five ASU campuses: Downtown Phoenix, Online, Polytechnic, Tempe and West with traditional, online, evening, weekend and accelerated formats.

## Undergraduate Policies

## Academic Integrity

Students in the Mary Lou Fulton Teachers College who do not exhibit integrity and professional behaviors in the classroom or when in the field are referred to the appropriate program coordinator or the division director for disciplinary action. Please refer to the academic integrity policy for more information http://provost.asu.edu/academicintegrity. [1]

## Academic Standing

Students in the college are evaluated throughout their degree progression. Students enrolled in undergraduate education programs are expected to maintain academic standards. To be in good standing, students must maintain an overall cumulative GPA of 2.50 or higher with at least a grade of "C" (2.00) in each undergraduate education courses and complete courses as outlined on the majormap. Students in the professional program will be formally reviewed regarding their academic progress and professional attributes in order to determine retention/continuation status. A student with a record that contains indicators of professional or academic concerns will be placed on probation, suspension, or permanently removed from the program.

## Advising

The Office of Student Services is dedicated to providing students with the very best academic support and guidance throughout their academic program. Academic program advisors provide assistance selecting classes and in fulfilling program requirements. Each ASU campus has dedicated academic advisors trained on all Teachers College programs. See http://education.asu.edu/content/student-services-contact-information [2] for advising locations and contact information. Students are encouraged to meet with their advisor every semester.

## Degree Requirements

Students are limited to a maximum of 18 credit hours per term. Enrollment in additional credit hours requires approval from a college academic advisor.
Audit: Teachers College students are permitted to audit any non-Professional Teacher Preparation Program (PTPP) course. Additional university fees are assigned to the course when the audit option is chosen.
Course Prerequisites: Enrollment in upper-division PTPP course work requires approval from the Teachers College. Review current course descriptions for course prerequisites.

Incomplete Grades: Incomplete grades will only be issued if a student is in good standing in the course and experiences an extenuating occurance just prior to the end of the term. Non-PTPP courses must be completed one calendar year from the initial grade assignment. Students enrolled in the PTPP must complete " 1 " grades before the next academic term.

Pass/Fail: Field experience and student teaching courses are evaluated on a pass/fail grading system. A " $Y$ " grade is assigned to a passed course and an "E" grade is assigned to a failed course. Only the "E" grade will be computed in the ASU cumulative GPA. Transfer: Students may transfer a maximum of 64 credits from a two-year institution. There is no limit to the number of credits transferred from a four-year institution. Students interested in substituting previous teacher preparation courses for current PTPP ASU courses must submit a Petition for Adjustment of Requirements to the Office of Student Services at their chosen campus.
Transfer students who are interested in starting the PTPP must submit an online form, have a 2.50 cumulative GPA, completion of 60 credit hours and fulfill specific course requirements as outlined by each Education major. Students who complete the AAEE, TAG and MAPP will meet the requirements for progression into the PTPP.
Withdrawal: Review the current university withdrawal procedures at http://students.asu.edu/withdrawal [3]
Students who begin at ASU as freshmen will follow a major map for their chosen program. The major map is an outline that students follow each term for enrollment. Students who have attended only ASU are reviewed at the completion of each term to ensure that they are on track for graduation. Transfer students must attend an advising session and will learn the degree requirements as well as minimum eligibility requirements for progression into the PTPP. The goal of the PTPP is to produce teachers of the highest quality. We are committed to providing support and resources for those students needing assistance for their academic or professional growth.
As stated previously, students are evaluated throughout the PTPP in accordance with the Mary Lou Fulton Teachers College Retention/Continuation Policy. Students in the program will be formally reviewed regarding their academic progress and professional attributes in order to determine retention/continuation status. A student with a record that contains indicators of professional or academic concerns will be placed on probation, suspension or permanently removed from the program. Students enrolled in undergraduate education programs are expected to maintain academic standards. To be in good standing, students must maintain an overall cumulative GPA of 2.50 or higher with at least a grade of " $C$ " $(2.00)$ in each undergraduate education course.
In addition to academic progress, students are evaluated regarding professional attributes in four areas:
Communication/knowledge level.
Interpersonal relations.
Professionalism.
Attitudes.
If there are concerns regarding a student's professional attributes, the student will be placed on probation, suspended or permanently removed from the program. Unless the student has been permanently removed from the program, they must participate in the development of a professional improvement plan (PIP), which establishes the requirements for continuation in the program. The PIP lists areas of concern and action steps necessary to improve the targeted behaviors. Students placed on a plan of improvement, probation or suspension, for any reason, are subject to disqualification by the Mary Lou Fulton Teachers College at the end of the following semester if the conditions imposed for reinstatement are not met. Students placed on a plan of improvement, probation or suspension, for any reason, are reviewed at the end of the following semester. Students demonstrating behaviors or characteristics that make it questionable whether they can succeed in the teaching profession may be disqualified or prescribed specific conditions under which continued participation is permitted; that is, probation or suspension even if the student meets minimum academic performance as measured by GPA. Students who wish to appeal decisions of the Mary Lou Fulton Teachers College of the Student Issues Committee may do so in writing to the Associate Dean of Student Affairs and Communications for Teachers College. Any exceptions to the retention and disqualification policies and procedures must be approved by the Mary Lou Fulton Teachers College Student Issues Committee and the associate dean for the college. Refer to the Retention and Continuation Policy for additional information.

## Other Special Requirements

Fingerprint Clearance Card: All students enrolling in the PTPP must participate in field experiences and student teaching. Students participating in field experience must have proof of a Fingerprint Clearance Card on file in the Office of Student Services before progression into the program. Effective January 1, 2008, per Arizona State Statute A.R.S. § 15-106, all teachers and persons who are required to be fingerprinted to work in the classroom are required to have an Identity Verified Prints (IVP) fingerprint clearance card. Milestones: All students admitted to the PTPP will be assigned a milestone that reflects their major academic plan. The milestone is used for enrollment in PTPP courses.

Intent to Progress: All students who started at ASU as first-time freshmen must submit an Intent to Progress form to the Office of Student Services during term three before beginning the program in term five.

## Graduate Policies

Academic Policies
The college offers Master of Education (M.Ed.), Master of Arts (M.A,) Doctor of Education (Ed.D.) and Doctor of Philosophy (Ph.D.) programs as well as Graduate Certificates. Some programs also allow students to obtain state or professional certification.
Satisfactory Progress Policies
Polices regarding satisfactory progress align with the policies of the Graduate College and are provided to students at the time of enrollment and are available on the College web site.
Graduation Requirement
Candidates for the graduate degrees must satisfactorily complete the particular culminating experience requirements of their specific programs. Information is available for each program from the Office of Student Services or from faculty advisors.

## Graduate Policies

General career advising in a program can be obtained by contacting the coordinator of the program in which a degree is offered. After admission to a degree program, specific advice related to degree requirements and activities is provided by academic advisors in the Office of Student Support. Call 602-543-3634 and ask for the academic advisor for a specific campus or program.

## Master's Programs

Policies specific to each master's degree program are provided to students at the time of enrollment in the program.
Continuous Enrollment and Reentry for Master's Programs
Once admitted to a masters degree program, the student is expected to be enrolled continuously until all requirements for the degree have been fulfilled. If a program of study must be interrupted for one semester, the student must apply to the Graduate College for a leave of absence. However, this leave status cannot exceed one semester. A student on leave is not required to pay fees, but is not permitted to place any demands on university faculty or use any university facilities. A student who interrupts a program without obtaining an approved leave may be removed from their degree program by the Graduate College, under the assumption that the student has decided to discontinue the program. A student removed by the Graduate College for this reason may reapply for admission to the program; the application is considered along with all other new applications to the degree program. An application for leave status, endorsed by the division director or designee, must be approved by the dean of the Graduate College. This request must be filed and approved prior to the semester of anticipated absence.
Master's Lack of Satisfactory Progress Policy
Students in M.A. or M.Ed. programs may be placed on academic probation for reasons stated in the particular program policy or for failure to maintain standards set by the Graduate College. Students in initial certification programs or others whose studies involve work at school sites are expected to maintain professional conduct as explained in program Satisfactory Progress Policies. Failure to meet these standards of professional conduct or violations of the student conduct code may result in academic probation, or, for egregious violations, immediate recommendation to the Graduate College for withdrawal.
Doctoral Programs
In addition to the Graduate College policy and procedures that govern doctoral programs at ASU and which are provided elsewhere in this catalog, the following provisions apply to all doctoral programs in the college. Additional information specific to a degree program may be provided as well when students first register for the program.
Continuous Enrollment and Reentry for Doctoral Programs
Once admitted to a doctoral degree program, the doctoral student is expected to be enrolled continuously, excluding summer sessions, until all requirements for the degree have been fulfilled. Continuous enrollment promotes steady progress toward the completion of the degree and an ongoing relationship between the student and faculty offering the program. If additional credit is not required toward the Ph.D. or Ed.D., the student may enroll for 695 or 795 Continuing Registration. Continuing registration does not carry credit; no grade is given. If a program of study must be interrupted for one semester, the student must apply to the Graduate College for a leave of absence (LoA). However, this leave status cannot exceed one semester. A student on leave is not required to pay fees, but is not permitted to place any demands on university faculty or use any university facilities. A student who interrupts a program without obtaining an approved LoA may be removed from their degree program by the Graduate College, under the assumption that the student has decided to discontinue the program. A student removed by the Graduate College for this reason may reapply for admission to the program; the application is considered along with all other new applications to the degree program. An application for leave status, endorsed by the members of the student's supervisory committee and the head of the academic unit, must be approved by the dean of the Graduate College. This request must be filed and approved prior to the semester of anticipated absence.
Ph.D. and Ed.D. Lack of Progress Policy
Students in Ph.D. and Ed.D. programs may be placed on academic probation for any of the following reasons:

Failing to meet the scholarship requirements of the Graduate College, a GPA of 3.00 (on a 4.00 scale) or failure to meet the scholarship requirements of the particular program.
Unsatisfactory progress as noted on annual review form by mentor or failure to meet for annual review.
Unsatisfactory progress due to conduct which violates the university student conduct code.
A student can be recommended to the Graduate College for dismissal from the doctoral program if:
The student fails to advance to candidacy within five years of the date of program admission.
The student fails to complete and successfully defend the dissertation within five years of advancing to candidacy.
The student is on probationary status for two consecutive semesters and is unable to get out of academic probation by meeting all of the specified conditions for making satisfactory academic progress by the end of his/her second semester on academic probation.
Additional Requirements
Fingerprint Clearance Card: All students enrolling in programs leading to certification must participate in field experiences and student or apprentice teaching. Students participating in field experience must have proof of a Fingerprint Clearance Card on file in the Office of Professional Field Experience before field placement hours begin. Effective January 1, 2008, per Arizona State Statute A.R.S. § 15-106, all teachers and persons who are required to be fingerprinted to work in the classroom are required to have an Identity Verified Prints (IVP) fingerprint clearance card.

Source URL: http://catalog.asu.edu/policies/mlftc
Links:
[1] http://provost.asu.edu/academicintegrity
[2] http://education.asu.edu/content/student-services-contact-information
[3] http://students.asu.edu/withdrawal

## Technology and Innovation, College of

## Undergraduate Policies

## Academic Integrity

Academic honesty is expected of all students in all areas (examinations, papers, academic transactions, records, etc). The possible sanctions include, but are not limited to, appropriate grade penalties, loss of registration privileges, disqualification and dismissal. The College of Technology and Innovation adheres strictly to the Student Code of Conduct regarding academic dishonesty. Copies of the Academic Integrity policy and the Student Code of Conduct may be obtained from your academic advisor, or online at http://provost.asu.edu/academicintegrity [1].

## Academic Standing

For purposes of retention, academic good standing for all students in the College of Technology and Innovation is defined as follows:
Academic Good Standing
Total Hours Earned Minimum Cumulative GPA
24 or fewer $\quad 1.60$
25-55 1.75
56 or more 2.00

## Probation

A student who does not maintain academic good standing after each fall or spring semester is placed on academic probation. A student placed on academic probation or continuing probation must meet with an academic advisor before registration for the subsequent semester.
A student placed on academic probation has one semester to raise his or her cumulative or semester GPA to meet the academic good standing criteria; otherwise, the student may be disqualified.

## Disqualification

During a semester on academic probation, a student who fails to meet the retention standards is disqualified. A student who has been disqualified is not permitted to enroll for the fall or spring semester. A student may request a review of their disqualification status by contacting the director of advising and student services in the College of Technology and Innovation.

## Advising

New incoming and transfer students should seek advising from an academic advisor in advising and student services. The college requires that students consult with an advisor before registering each semester. Advisors should be made aware of any employment obligations or special circumstances that may affect a student's ability to successfully handle a full course load. Students may register for a maximum of 19 credit hours per semester. Any student wishing to take more than the maximum must petition the college's standards committee and have an approval on file before registering for a course overload.

## Reinstatement/Readmission

The college does not accept an application for reinstatement until the disqualified student has remained out of the college for at least one semester. Merely having remained in disqualified status for this period of time does not, in itself, constitute a basis for reinstatement. Proof of commitment to higher education is required. For example, the ability to do satisfactory college work in the chosen discipline by completing pertinent courses in the discipline at a community college with higher-than-average grades or satisfactory completion of an internship or work experience with supporting documentation.

## Graduate Policies

Advising and Program of Study
The program of study is planned in consultation with an appointed supervisory committee. It is designed for flexibility, permitting the student to select a combination of courses in a technological area and a supporting area to meet individual career goals. A minimum of 33 credit hours is required for the degree program. Of these, a minimum of 15 credit hours must be 500-level courses and part of the approved program. A maximum of 12 hours of course work may be taken from offerings outside the College of Technology and Innovation with approval of the appropriate academic program or department. Programs of study for the M.S.Tech., with an interdisciplinary area of concentration, may have up to but not more than 15 hours of course work drawn from areas outside the College of Technology and Innovation at the discretion of the program or department in which the concentration is administered. A maximum of nine credit hours of appropriate course work completed before admission may be included in the program of study.

Source URL: http://catalog.asu.edu/policies/tech innov
Links:
[1] http://provost.asu.edu/academicintegrity

## University College

## Undergraduate Policies

## Academic Integrity

Academic honesty is expected of all students in all examinations, papers, academic transactions and records. The possible sanctions include, but are not limited to, appropriate grade penalties, loss of registration privileges, disqualification and dismissal. University College adheres strictly to the Student Code of Conduct regarding academic dishonesty. A copy of the Student Code of Conduct may be obtained from your academic advisor, or online at http://provost.asu.edu/academicintegrity [1].

## Academic Standing

For purposes of retention, academic good standing for all students in University College is defined as follows:
Academic Good Standing
Total Hours Earned Minimum Cumulative GPA
24 or fewer $\quad 1.60$
25-55 1.75
56 or more 2.00

## Probation/Disqualification

A student who does not maintain academic good standing after each fall or spring semester is placed on academic probation. A student placed on academic probation or continuing probation must meet with an academic advisor before registration for the subsequent semester.
A student placed on academic probation has one semester to raise his or her cumulative or semester GPA to meet the academic good standing criteria; otherwise, the student may be disqualified. A student who has been disqualified is not permitted to enroll for the fall or spring semester.
Exploratory Status Eligibility

Students may remain designated as exploratory track status until they complete 45 credit hours. Students who have not declared a major by the time they have completed 45 credit hours are placed on administrative hold, which prevents registration for future ASU semesters, until the student has declared a major.

## Degree Requirements

Critical Requirements
All incoming ASU freshmen are required to complete critical tracking requirements that provide a foundation for future study in each field. University College has developed major maps, with critical tracking requirements, that support the exploration of potential majors during a student's first three semesters at the university. Upon admission to ASU, all first-year exploratory students are required to declare an exploratory track in one of four areas:
Exploratory social and behavioral sciences.
Exploratory health and life sciences.
Exploratory humanities and fine arts.
Exploratory math, physical sciences, engineering and technology.
Each of these tracks is designed to provide students with introductory courses in a field of choice (e.g., introduction to psychology, introduction to environmental design), general studies education and elective courses that reinforce student interests. Each exploratory track is composed of a three-semester major map, culminating in the declaration of a major by no later than the completion of 45 credit hours. Students are required to maintain a GPA that keeps them in good academic standing with the university and allows them to declare the major of their choosing. Major maps for each of these exploratory tracks are available at https://webapp4.asu.edu/programs/t5/MajorMaps [2].

## Degree Requirements

## Required Courses

All exploratory students are required to enroll in a UNI 150/250 major and career exploration class each semester the student remains designated as an exploratory track student.
All new freshman exploratory students are required to enroll in the ASU 101 course during their first ASU semester.

Source URL: http://catalog.asu.edu/policies/univ college
Links:
[1] http://provost.asu.edu/academicintegrity
[2] https://webapp4.asu.edu/programs/t5/MajorMaps

## Academic Programs

 Concurrent and Joint Degrees| Degrees | Administered By |
| :---: | :---: |
| Architecture (M.Arch.)/Business Administration (MBA) [1] | Herberger Institute for Design and the Arts [2] |
|  | W. P. Carey School of Business [3] |
| Business Administration (MBA)/Electrical Engineering (M.S.E.) [4] | W. P. Carey School of Business [3] |
|  | Ira A. Fulton Schools of Engineering [5] |
| Business Administration (MBA)/Health Sector Management (M.H.S.M.) | W. P. Carey School of Business [3] |
| Business Administration (MBA)/Industrial Engineering (M.S.E.) | W. P. Carey School of Business [3] Ira A. Fulton Schools of Engineering [5] |
| Business Administration (MBA)/Information Management (M.S.) [6] | W. P. Carey School of Business [3] |
| Business Administration (MBA)/International Management (M.I.M.) | W. P. Carey School of Business [3] |
|  | Carlos III University of Madrid [7] (Spain) |
|  | Graduate School of Business Administration [8] (Peru) |
|  | Graduate School of Commerce [9] (France) |
|  | Monterrey Institute for Technical and Superior |
|  | Studies [10], Mexico State Campus (Mexico) |
| Business Administration (MBA)/Master of Engineering (M.Eng.) | W. P. Carey School of Business [3] |
| Specialization in Embedded Systems | Ira A. Fulton Schools of Engineering [5] |
| Business Administration (MBA)/Master of Engineering (M.Eng.) | W. P. Carey School of Business [3] |
| Specialization in Software Engineering | Ira A. Fulton Schools of Engineering [5] |
| Business Administration (MBA)/Master of Engineering (M.Eng.) | W. P. Carey School of Business [3] |
| Specialization in Systems Engineering | Ira A. Fulton Schools of Engineering [5] |
| Business Administration (MBA)/Taxation (M.Tax.) | W. P. Carey School of Business [3] |
| Construction with a concentration in Management (M.S.)/Maestria en Ciencias con Especialidad en Ingenieria y Administracion de la Construccion | Ira A. Fulton Schools of Engineering [5] |
|  | Instituto Tecnologico y de Estudios Superiores de Monterrey, Monterrey Campus [11] |
| Law (JD)/Business Administration (MBA) | Sandra Day O'Connor College of Law [12] |
|  | W. P. Carey School of Business [3] |
| Law (JD)/Health Sector Management (M.H.S.M.) | Sandra Day O'Connor College of Law [12] |
|  | W. P. Carey School of Business [3] |
| Law (JD)/Justice Studies (Ph.D.) | Sandra Day O'Connor College of Law [12] |
|  | Justice and Social Inquiry [13] |
| Law (JD)/Medicine (M.D.) | Sandra Day O'Connor College of Law [12] |

Source URL: http://catalog.asu.edu/concurrent dual

## Links:

[1] http://wpcarey.asu.edu/mba/full-time/academics/architecture.cfm
[2] http://herbergercollege.asu.edu/
[3] http://wpcarey.asu.edu/
[4] http://cpd.asu.edu/programs
[5] http://engineering.asu.edu/
[6] http://wpcarey.asu.edu/mba/full-time/academics/MSIM.cfm
[7] http://www.mba-master.net/en/index.shtml
[8] http://www.esan.edu.pe/
[9] http://www.esc-toulouse.fr/en/p437_206/.html
[10] http://www.itesm.edu/
[11] http://www.itesm.edu
[12] http://www.law.asu.edu/
[13] http://justice.clas.asu.edu/
[14] http://www.mayo.edu/mms/
[15] http://psychology.clas.asu.edu/
[16] http://spa.asu.edu/new/mpa/mpa_msw.htm
[17] http://copp.asu.edu/

## Accelerated Bachelor's and Master's Programs

| Degrees | Administered By |
| :---: | :---: |
| Accounting (B.S.)/Accountancy (M.Acc.) | W. P. Carey School of Business [1] |
| Accounting (B.S.)/Taxation (M.Tax.) | W. P. Carey School of Business [1] |
| Aerospace Engineering (B.S.E./M.S.) | Ira A. Fulton Schools of Engineering [2] |
| Aerospace Engineering (B.S.E./M.S.E.) | Ira A. Fulton Schools of Engineering [2] |
| American Studies (B.A.)/Interdisciplinary Studies (M.A.) | New College of Interdisciplinary Arts and Sciences [3] |
| Biochemistry (B.S./M.S.) - Emphasis in Medicinal Chemistry | College of Liberal Arts and Sciences [4] |
| Bioengineering (B.S.E./M.S.) | Ira A. Fulton Schools of Engineering [2] |
| Biological Sciences (B.S.)/Biology (M.S.) | College of Liberal Arts and Sciences [4] |
| Civil Engineering (B.S.E.)/Civil and Environmental Engineering (M.S.) | Ira A. Fulton Schools of Engineering [2] |
| Civil Engineering (B.S.E.)/Civil and Environmental Engineering (M.S.E.) | Ira A. Fulton Schools of Engineering [2] |
| Communication Studies (B.A. or B.S./M.A.) | New College of Interdisciplinary Arts and Sciences [3] |
| Computational Mathematical Sciences (B.S.)/Mathematics (M.A.) | College of Liberal Arts and Sciences [4] |
| Computer Science (B.S./M.S.) [5] | Ira A. Fulton Schools of Engineering [2] |
| Computer Systems Engineering (B.S.E.)/Computer Science (M.S.) [6] | Ira A. Fulton Schools of Engineering [2] |
| Construction (B.S./M.S.) | Ira A. Fulton Schools of Engineering [2] |
| Criminal Justice and Criminology (B.S.)/Criminal Justice (M.A.) | College of Public Programs [7] |
| Criminal Justice and Criminology (B.S.)/Criminology and Criminal Justice (M.S.) | College of Public Programs [7] |
| Electrical Engineering (B.S.E./M.S.E.) | Ira A. Fulton Schools of Engineering [2] |
| Chemical Engineering (B.S.E./M.S. or M.S.E.) | Ira A. Fulton Schools of Engineering [2] |
| Ethnicity, Race and First Nations Studies (B.A.)/Interdisciplinary Studies (M.A.) | New College of Interdisciplinary Arts and Sciences [3] |

Family and Human Development (B.S./M.S.)

| Global Health (B.A./M.A.) | College of Liberal Arts and Sciences [4] |
| :---: | :---: |
| History (B.A./M.A.) | College of Liberal Arts and Sciences [4] |
| Industrial Engineering (B.S.E./M.S. or M.S.E.) | Ira A. Fulton Schools of Engineering [2] |
| Integrative Studies (B.A.)/Interdisciplinary Studies (M.A.) | New College of Interdisciplinary Arts and Sciences [3] |
| Journalism and Mass Communication (B.A.)/Mass | Walter Cronkite School of Journalism and Mass |
| Communication (M.M.C.) | Communication [8] |
| Materials Science and Engineering (B.S.E./M.S.) | Ira A. Fulton Schools of Engineering [2] |
| Materials Science and Engineering (B.S.E./M.S.E.) | Ira A. Fulton Schools of Engineering [2] |
| Mathematics (B.S./M.A.) | College of Liberal Arts and Sciences [4] |
| Mechanical Engineering (B.S.E./M.S. or M.S.E.) | Ira A. Fulton Schools of Engineering [2] |
| Parks and Recreation Management (B.S.)/Recreation and Tourism Studies (M.S.) | College of Public Programs [7] |
| Urban Planning (B.S.P.)/Urban and Environmental Planning (M.U.E.P.) | College of Liberal Arts and Sciences [4] Herberger Institute for Design and the Arts [9] |
| Political Science (B.A./M.A.) | College of Liberal Arts and Sciences [4] |
| Social and Behavioral Sciences (B.A. or B.S.)/Interdisciplinary Studies (M.A.) | New College of Interdisciplinary Arts and Sciences [3] |
| Sociology (B.S./M.A.) | College of Liberal Arts and Sciences [4] |
| Tourism Development and Management (B.S.)/Recreation and Tourism Studies(M.S.) | College of Public Programs [7] |
| Women's Studies (B.A. or B.S.)/Interdisciplinary Studies (M.A.) | New College of Interdisciplinary Arts and Sciences [3] |

## Source URL: http://catalog.asu.edu/accelerated

## Links:

[1] http://wpcarey.asu.edu/
[2] http://engineering.asu.edu/
[3] http://newcollege.asu.edu/
[4] http://clas.asu.edu/
[5] http://sci.asu.edu/undergraduate/index.php
[6] http://sci.asu.edu
[7] http://copp.asu.edu/
[8] http://cronkite.asu.edu
[9] http://herbergercollege.asu.edu/

## Graduate Programs

## Graduate Degrees and Certificates (Program Descriptions and Requirements)

Business, W. P. Carey School of

Accountancy, MAcc (BAACCMACC)
Online Degree Search Title: Accountancy (MACC)
Campus: TEMPE
Program Description: The Master of Accountancy (M.Acc.) program is structured to provide students with an in-depth working knowledge of advanced accounting topics that are most relevant in today's business environment. The program prepares students for a wide range of professional careers in accounting and also aids significantly in preparation for the certified public accountant examination. The M.Acc. program also offers an emphasis in information systems.

Degree Requirements: 30 credit hours including a Capstone (ACC 588)
The M.Acc. program is a cohort-based, full-time program that requires a bachelor's degree in accountancy and spans three, 10-week trimesters (Aug. through May). Applicants must complete program prerequisites prior to admission to the program. Refer to the School of Accountancy website for a current listing of required course prerequisites. Graduate-level accounting courses are only open to students admitted to the graduate program.

## Admission Requirements:

- All applicants are required to submit an online application to the Graduate College. Complete application instructions may be obtained from the school's website.
- Applicants must submit scores from the Graduate Management Admissions Test (GMAT).
- All applicants are also required to submit the supplemental application materials required by the School of Accountancy.
- International applicants whose native language is not English must submit scores from the Test of English as a Foreign Language (TOEFL) examination.

Preference in admission is given to those with degrees in accounting and business, although other exceptional candidates are considered.

## Contact Information:

Business, W. P. Carey School of
School of Accountancy
http://wpcarey.asu.edu/accounting
BA 223Q
wpcareyacc@asu.edu
480-965-3631

## Business Administration (Accountancy), PHD (BAACCTPHD)

Online Degree Search Title: Accountancy (PhD)
Campus: TEMPE
Program Description: The objective of the Ph.D. in business administration with a concentration in accountancy is to prepare scholars to conduct high-quality research and to teach in the fields of:

- Auditing.
- Financial accounting.
- Managerial accounting.
- Taxation.

This program allows students to develop the capability to review, analyze, conduct and publish research through a series of research seminars, theory-building and statistical course work that supplement and complement students' abilities and desires. In addition, Ph.D. students participate in ongoing research projects in conjunction with faculty members in the School of Accountancy.

Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation

## Plan of Study

This program consists of 12 hours of dissertation and 72 hours of course work and research. Students may not apply credit hours earned for a doctoral degree previously awarded at ASU or another institution toward their current ASU doctoral degree. However, at the academic unit's discretion, students may apply up to 30 credit hours from a previously awarded master's degree toward their doctoral plan of study.
Students work with their study committees to determine an appropriate plan of study. Common areas of functional specialization among doctoral studies include financial and managerial accounting, auditing and taxation. With these functional areas, doctoral studies may emphasize experimental or archival research methods. All accountancy doctoral students are required to take a threesemester sequence of accountancy doctoral course work. A maximum of 12 approved graduate credit hours can be transferred to satisfy program requirements.
Comprehensive Examinations
Upon completion of all necessary course work on a student's approved plan of study, the academic unit may initiate the scheduling and administering of a student's comprehensive examinations. The comprehensive examination consists of a minimum of a written exam; at the discretion of the academic unit, an oral exam may also be required.
Candidacy
Ph.D. students are notified of achieving candidacy status in a letter from the dean of the Graduate College upon 1) passing the comprehensive examinations, and 2 ) successfully defending the dissertation prospectus.
Dissertation Requirements
Students are required to present a dissertation to satisfy the research requirement for the Ph.D. degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.
Students must be enrolled in at least one credit hour that appears on the program of study or one hour of appropriate graduatelevel credit (such as 795 Continuing Registration) during the semester (including summer session) in which the student defends the dissertation.
Note: For detailed information regarding the university's doctoral degree requirements, please refer to the Graduate College's Doctor of Philosophy policy and procedures.
Maximum Time Limit
Doctoral students must complete all program requirements within a 10-year period. The 10-year period starts with the initial enrollment into the doctoral program. In addition, the student must take the final oral examination in defense of the dissertation within five years after passing the comprehensive examinations. Any exception must be approved by the supervisory committee and the dean of the Graduate College, and ordinarily involves repetition of the comprehensive examinations.

Admission Requirements: All applicants must submit the Graduate College online application. Applications are initially reviewed by a School of Accountancy doctoral committee using a portfolio approach. In addition to GMAT scores and prior academic performance, letters of recommendation and a personal statement are reviewed to ensure a good "fit" between the student's goals and the school. A recommendation for action is then made to the director of Ph.D. programs in the W. P. Carey School of Business, who in turn makes a recommendation to the Graduate College. The Graduate College either admits or denies each applicant and notifies them in writing.

## Contact Information:

Business, W. P. Carey School of
Business Administration
http://wpcarey.asu.edu/accounting
BA 223Q
wpcareyacc@asu.edu
480-965-3631

## Business Administration (Computer and Information Systems), PHD (BAINFSYPHD)

Online Degree Search Title: Computer Information Systems (PhD)
Campus: TEMPE

Program Description: The objective of the Ph.D. in business administration with a concentration in computer information systems is to prepare scholars for careers at leading educational institutions. This program allows students to develop the capability to review, analyze, conduct and publish research through a series of seminars and additional supporting course work. In addition, Ph.D.
students participate in ongoing research projects in conjunction with faculty members in the Department of Information Systems.

Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation
Plan of Study

The doctoral program consists of a minimum of 84 credit hours of graduate-level course work beyond the bachelor's degree. A minimum of 42 hours of doctoral course work and 12 hours of dissertation credits are required to be taken at Arizona State University's Tempe campus. At the department's discretion, students may apply up to 30 credit hours from a previously awarded master's degree toward their doctoral plan of study.
Students work with their program committees to determine an appropriate plan of study. Common areas of specialization for doctoral studies include:

- Accounting information systems.
- Artificial intelligence in business.
- Business process improvement and workflow engineering.
- Data mining.
- Database management systems.
- Decision support systems.
- Distributed information systems.
- Health information technology.
- Information security.
- Information technology outsourcing.
- IT infusion and human interface.
- Knowledge management.
- Systems analysis and design.


## Comprehensive Examinations

Upon completion of all necessary course work on a student's approved plan of study, the academic unit may initiate the scheduling and administering of a student's comprehensive examinations. The comprehensive examination consists of a minimum of a written exam; at the discretion of the academic unit, an oral exam may also be required.
Candidacy
Ph.D. students are notified of achieving candidacy status in a letter from the dean of the Graduate College upon 1) passing the comprehensive examinations, and 2) successfully defending the dissertation prospectus.
Dissertation Requirements
Students are required to present a dissertation to satisfy the research requirement for the Ph.D. degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.
Students must be enrolled for at least one credit hour that appears on the program of study or one hour of appropriate graduatelevel credit (such as 795 Continuing Registration) during the semester (including summer session) in which the student defends the dissertation.
Note: For detailed information regarding the university's doctoral degree requirements, please refer to the Graduate College's Doctor of Philosophy policy and procedures.
Maximum Time Limit
Doctoral students must complete all program requirements within a 10-year period. The 10-year period starts with the initial enrollment into the doctoral program. In addition, the student must take the final oral examination in defense of the dissertation within five years after passing the comprehensive examinations. Any exception must be approved by the supervisory committee and the dean of the Graduate College, and ordinarily involves repetition of the comprehensive examinations.

Admission Requirements: For more information on requirements, please review the department's website. Please also review the Graduate College website for specific ASU admission requirements.
Applications are reviewed by the department's faculty committee using a portfolio approach. The committee will review each individual application and examine all parts equally.

## Contact Information:

Business, W. P. Carey School of
Business Administration
http://wpcarey.asu.edu/information-systems/doctoral/overview.cfm
BA 301P
wpcareyis@asu.edu
480-965-3252

## Business Administration (Finance), PHD (BAFINANPHD)

Online Degree Search Title: Finance (PhD)
Campus: TEMPE

Program Description: The primary objective of the Ph.D. program in finance is to train students for careers as professors of finance at major research universities. The program provides a challenging course of study in the most recent developments in both the theoretical and empirical aspects of financial economics. This course of study, along with work in economics and statistics, serves as preparation for understanding and critical analysis of current issues in finance.

Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation
Plan of Study
At least 30 hours (which may include research credit) of the approved Ph.D. program and 12 dissertation hours must be completed after admission to the student's Ph.D. program. Students may not apply credit hours earned for a doctoral degree previously awarded at ASU or another institution toward their current ASU doctoral degree. However, at the individual academic unit's discretion, students may apply up to 30 relevant credit hours from a previously awarded master's degree toward their doctoral program of study.
Comprehensive Examinations
Upon completion of all necessary course work on a student's approved program of study, the academic unit may initiate the scheduling and administering of a student's comprehensive examination. The comprehensive examination consists of a minimum of a written exam; at the discretion of the academic unit, an oral exam may also be required.
Candidacy
Ph.D. students are notified of achieving candidacy status in a letter from the dean of the Graduate College upon 1) passing the comprehensive examinations, and 2) successfully defending the dissertation prospectus.
Dissertation Requirements
Students are required to present a dissertation to satisfy the research requirement for the Ph.D. degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.
Students must be enrolled for at least one credit hour that appears on the program of study or one hour of appropriate graduatelevel credit (such as 795 Continuing Registration) during the semester (including summer session) in which the student defends the dissertation.
Note: For detailed information regarding the university's doctoral degree requirements, please refer to the Graduate College's Doctor of Philosophy policy and procedures.
Maximum Time Limit
Doctoral students must complete all program requirements within a 10-year period. The 10-year period starts with the initial enrollment into the doctoral program. In addition, the student must take the final oral examination in defense of the dissertation within five years after passing the comprehensive examinations. Any exception must be approved by the supervisory committee and the dean of the Graduate College, and ordinarily involves repetition of the comprehensive examinations.

Admission Requirements: Admission to the Ph.D. in business administration with a concentration in finance is granted to applicants who present convincing evidence of high-order analytical skills, intellectual curiosity and the ability to work independently in pursuing scholarly research. Applicants should possess the intellectual curiosity and discipline required for original inquiry. In addition to the general requirements of the Graduate College, applicants must submit three academic letters of recommendation, scores from the GMAT or GRE, and a brief statement of their career objectives. In addition, applicants should also submit a resume. While many accepted students have an MBA or M.S. in a business-related field, others have a background in other areas, such as engineering, economics, mathematics, physics or political science.

## Contact Information:

Business, W. P. Carey School of
Business Administration
http://wpcarey.asu.edu/finance
BAC 519
wpcareyfin@asu.edu
480-965-3131

## Business Administration (Management), PHD (BAMGMTPHD)

Online Degree Search Title: Management (PhD)
Campus: TEMPE
Program Description: The Department of Management offers students the opportunity to obtain a Ph.D. in business with a concentration in management. Although management is a broad field, this doctoral program is best suited for students interested in specializing in organizational behavior and/or strategic management. The doctoral program places primary emphasis on the development of research competence and also emphasizes teaching as a vehicle to academic professionalism. The mission of the
program is to provide an environment that is conducive to the development of scholars who are prepared to assume the diverse responsibilities of faculty positions at leading research universities.

Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation
Plan of Study
At least 30 hours (which may include research credit) of the approved Ph.D. program and 12 dissertation hours must be completed after admission to the student's Ph.D. program. Students may not apply credit hours earned for a doctoral degree previously awarded at ASU or another institution toward their current ASU doctoral degree. However, at the individual academic unit's discretion, students may apply up to 30 credit hours from a previously awarded master's degree toward their doctoral program of study.
Doctoral students are required to commit full-time attention to the program, at least until they have successfully defended the dissertation proposal. Full-time enrollment entails a minimum of six hours of course work in any regular academic semester. To reach a total of 84 credit hours for the program, most students enroll for 9 to 12 credit hours per semester. In addition, students work closely with faculty members through a research assistantship. The program is relatively small with an emphasis on high quality; we provide a great deal of individual attention and mentoring to our students.
Comprehensive Examinations
Upon completion of all necessary course work on a student's approved program of study, the academic unit may initiate the scheduling and administering of a student's comprehensive examinations. The comprehensive examination consists of a minimum of a written exam; at the discretion of the academic unit, an oral exam may also be required.
Candidacy
Ph.D. students are notified of achieving candidacy status in a letter from the dean of the Graduate College upon:

- Passing the foreign language examination, if applicable.
- Passing the comprehensive examinations.
- Successfully defending the dissertation proposal.


## Dissertation Requirements

Students are required to present a dissertation to satisfy the research requirement for the Ph.D. degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.
Students must be enrolled for at least one credit hour that appears on the plan of study or one hour of appropriate graduate-level credit (such as 795 Continuing Registration) during the semester (including summer sessions) in which the student defends the dissertation.
Maximum Time Limit
Doctoral students must complete all program requirements within a 10-year period. The 10-year period starts with the semester and year of admission to the doctoral program. In addition, the student must take the final oral examination in defense of the dissertation within five years after passing the comprehensive examinations. Therefore, the maximum time limit is the shortest of the following:

- Time period since initial enrollment (10-year time limit).
- Time after passing the comprehensive exams (5-year time limit).

Any exception must be approved by the supervisory committee and the Graduate College dean, and ordinarily involves repetition of the comprehensive examinations.

Admission Requirements: Applications are initially reviewed by a faculty committee using a portfolio approach. Materials are reviewed to ensure a good "fit" between the student's goals and research interests and those of the department. A recommendation for action is then made to the Graduate College. The Graduate College either admits or denies each applicant and notifies them in writing.
All applicants must submit:

- The Graduate College online application.
- GMAT scores and prior academic performance records.
- Letters of recommendation.
- A personal statement.


## Contact Information:

Business, W. P. Carey School of
Business Administration
http://wpcarey.asu.edu/management-degree/doctoral/index.cfm
BA 323
wpcareymgt@asu.edu
480-965-3431

## Business Administration (Marketing), PHD (BAMARKPHD)

Online Degree Search Title: Marketing (PhD)
Campus: TEMPE

Program Description: The Ph.D. program is for those students who want to become full-time professors at research-oriented universities. It is not intended for people who want to work in industry positions. It is a full-time program only, and students take all of their courses on-campus.
All students complete a core curriculum, yet tailor their work to achieve personal goals. For those who already hold a master's degree, our program is designed to be completed in four years. For those who hold a bachelor's degree, the program is designed to be completed in five years.

Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation
Plan of Study
At least 30 hours (which may include research credit) of the approved Ph.D. program and 12 dissertation hours must be completed after admission to the student's Ph.D. program. Students may not apply credit hours earned for a doctoral degree previously awarded at ASU or another institution toward their current ASU doctoral degree. However, at the individual academic unit's discretion, students may apply up to 30 credit hours from a previously awarded master's degree toward their doctoral program of study.
Comprehensive Examinations
Upon completion of all necessary course work on a student's approved program of study, the academic unit may initiate the scheduling and administering of a student's comprehensive examinations. The comprehensive examination consists of a minimum of a written exam; at the discretion of the academic unit, an oral exam may also be required.
Candidacy
Ph.D. students are notified of achieving candidacy status in a letter from the dean of the Graduate College upon 1) passing the comprehensive examinations, and 2 ) successfully defending the dissertation prospectus.
Dissertation Requirements
Students are required to present a dissertation to satisfy the research requirement for the Ph.D. degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.
Students must be enrolled for at least one credit hour that appears on the program of study or one hour of appropriate graduatelevel credit (such as 795 Continuing Registration) during the semester (including summer session) in which the student defends the dissertation.
Note: For detailed information regarding the university's doctoral degree requirements, please refer to the Graduate College's Doctor of Philosophy policy and procedures.
Maximum Time Limit
Doctoral students must complete all program requirements within a 10-year period. The 10-year period starts with the initial enrollment into the doctoral program. In addition, the student must take the final oral examination in defense of the dissertation within five years after passing the comprehensive examinations. Any exception must be approved by the supervisory committee and the dean of the Graduate College, and ordinarily involves repetition of the comprehensive examinations.

Admission Requirements: Applications are initially reviewed by a faculty committee using a portfolio approach. Materials are reviewed to ensure a good "fit" between the student's goals and research interests and those of the department. A recommendation for action is then made to the Graduate College. The Graduate College either admits or denies each applicant and notifies them in writing.
All applicants must submit:

- The Graduate College online application.
- GMAT scores and prior academic performance records.
- Letters of recommendation.
- A personal statement.


## Contact Information:

Business, W. P. Carey School of
Business Administration
http://wpcarey.asu.edu/
BAC 460
wpcareymkt@asu.edu
480-965-3621

# Business Administration (Supply Chain Management), PHD (BASCMPHD) 

Online Degree Search Title: Supply Chain Management (PhD)
Campus: TEMPE

Program Description: The objective of the Ph.D. in business administration with a concentration in supply chain management (SCM) is to prepare scholars to conduct high-quality research and teach in the field of supply chain management. Supply chain management incorporates the core areas of logistics, operations management and sourcing/purchasing.
It is a full-time residential program for students whose career goals are full-time university research and teaching upon completion of the degree. Students are trained to competently recognize SCM-related problems, frame these problems into research questions and address them in a scholarly manner. Students are required to review, analyze, conduct and publish research through a series of doctoral seminars and supplemental course work that encourages creativity and critical thinking.

Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation
The Ph.D. program requires the completion of course work, the completion of academic papers for submission to journals, a comprehensive exam and a dissertation. The program is generally viewed as a four-year process. Most students will serve in research assistantships for all four years. During the program, students are expected to actively participate in required courses as well as in seminars and presentations from colleagues, department faculty and visiting scholars. Students will also have the opportunity to teach courses during their Ph.D program. Teaching assistantships will typically be made available during the last two years of the program. This will allow doctoral students to get research projects and manuscripts into the multi-year pipeline typical of accepted research articles. Through our areas of excellence, centers and faculty, the SCM program has special opportunities for industry-based research projects.

## Course Work

The Ph.D. program consists of a minimum of 84 credit hours of approved graduate course work beyond the bachelor's degree. The department requires doctoral students to take 48 credit hours of graduate course work in residence at ASU during their first two years. The specific classes must be approved by faculty in the student's area of excellence. Students are also required to take 12 hours of research and 12 hours of dissertation credit. A maximum of 12 credits can be transferred from previous graduate course work. Moreover, each student's program of study must be approved in advance by their program chair.
Academic Papers
Students are expected to work on academic papers for submission to journals during their Ph.D. program. Summer months are intended for manuscript writing for those students who have yet to successfully defend their dissertation proposals. At the end of each summer, all doctoral students are required to have at least one new manuscript ready for submission to a journal for publication. Faculty in the areas of excellence will supervise manuscript planning and writing. The bulk of the writing is to be done during the summer by the student. Faculty in the student's area of excellence will evaluate the papers and provide detailed feedback and instructions for rewriting/reworking of papers.
Comprehensive Examinations
Upon completion of all necessary course work on a student's approved program of study, the academic unit may initiate the scheduling and administering of a student's comprehensive examinations. The comprehensive examination consists of a minimum of a written exam; at the discretion of the academic unit, an oral exam may also be required.
Candidacy
Ph.D. students are notified of achieving candidacy status in a letter from the dean of the Graduate College upon 1) passing the comprehensive examinations, and 2) successfully defending the dissertation prospectus.
Dissertation Requirements
Students are required to present a dissertation to satisfy the research requirement for the Ph.D. degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.
Students must be enrolled for at least one credit hour that appears on the program of study or one hour of appropriate graduatelevel credit (such as 795 Continuing Registration) during the semester (including summer session) in which the student defends the dissertation.
Note: For detailed information regarding the university's doctoral degree requirements, please refer to the Graduate College's Doctor of Philosophy policy and procedures.
Maximum Time Limit
Doctoral students must complete all program requirements within a 10-year period. The 10-year period starts with the initial enrollment into the doctoral program. In addition, the student must take the final oral examination in defense o

Admission Requirements: Applications are initially reviewed by a faculty committee using a portfolio approach. Materials are reviewed to ensure a good "fit" between the student's goals and research interests and those of the department. A recommendation for action is then made to the Graduate College. The Graduate College either admits or denies each applicant and notifies them in writing.
All applicants must submit:

- The Graduate College online application.
- GMAT scores and prior academic performance records.
- Letters of recommendation.
- A personal statement.


## Contact Information:

Business, W. P. Carey School of
Business Administration
http://wpcarey.asu.edu/scm
BA 446
wpcarey.scm@asu.edu
480-965-6044

## Economics, PHD (BAECONPHD)

## Online Degree Search Title: Economics (PhD)

 Campus: TEMPEProgram Description: The Ph.D. program in economics is a full-time program intended to prepare students for teaching and research positions at four-year institutions of higher education, and research positions in public agencies or private business organizations. The Ph.D. program is relatively small in size, with about 40 doctoral students in residence at any time. The low student-faculty ratio allows us to provide greater faculty attention and mentoring compared to larger programs. Students are involved in teaching, research and seminar activities, becoming valued members of the department. Most of our Ph.D. students are supported through teaching and research assistantships for four years. Stipends are highly competitive with any graduate program in the country.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation In addition to completing 60 credit hours beyond the bachelor's degree ( 30 credit hours beyond the master's degree) and 24 credit hours of research and dissertation, the Ph.D. student must accomplish five tasks:

- Meet the qualification requirement.
- Present at least one area of emphasis.
- Pass the comprehensive examination.
- Pass the dissertation proposal defense.
- Complete a dissertation with an oral defense.

See the Department of Economics graduate student handbook for details concerning these tasks.

## Admission Requirements:

- All applicants to the Ph.D. program in economics must have a bachelor's degree or the equivalent.
- Each applicant must submit an online application form, fee and other materials to the ASU Graduate College; admission guidelines are available from the Graduate College.
- The Department of Economics requires applicants to send scores from the aptitude portion of the GRE. Applications will not be reviewed until the GRE score is received.
- Applicants whose first language is not English must satisfy English Proficiency (see the Graduate College website).
- Applicants are required to submit three letters of reference to the Ph.D. program director in the Department of Economics.

Our admissions policy weighs several factors including letters of reference, overall GPA, GRE scores and performance in selected mathematics and economics courses. We have no absolute standards for any of the factors, but performance on each clearly should suggest academic potential that is far above those of the normal undergraduate student.
Application deadline for fall admission is Jan. 15.

## Contact Information:

Business, W. P. Carey School of
Department of Economics
http://wpcarey.asu.edu/
CPCOM 412
wpcareyecn@asu.edu
480-965-3531
Information Management, MS (BAINFOMS)

Online Degree Search Title: Information Management (MS)

## Campus: ONLNE, TEMPE

Program Description: The Master of Science in information management is a one-year, evening degree program designed for working professionals. The W. P. Carey School of Business understands the importance of teaching strong business management and technological skills. The program will prepare students to manage in an information technology (IT) environment. Students will also learn the business skills needed to leverage IT to gain a competitive advantage in the global economy.

Degree Requirements: MSIM Evening: 30 credit hours and an Applied Project or MSIM/MBA, Dual Degree: 30 credit hours and an Applied Project
The Master of Science in information management is a one-year program with an intensive state-of-the-art curriculum. Please access the department's website for a list of courses. This lock-step program consists of 10 courses that begin in June and end in May, including an applied project. The program offers evening classes that meet twice a week, and are customized for full-time working professionals.

Admission Requirements: Minimum requirements for admission to the Master of Science in information management program are:

- Two years of full-time related work experience.
- An undergraduate degree in a related field from an accredited university.
- Completed prerequisite college-level courses or equivalent experience in statistics, brief calculus and a programming language.

All applicants are required to submit the Graduate College online application and the supplemental application materials required by the department. Complete application instructions may be obtained from the department's website. The GMAT exam is not required. International applicants whose native language is not English must submit scores from the Test of English as a Foreign Language (TOEFL).

## Contact Information:

Business, W. P. Carey School of
Department of Information Systems
http://wpcarey.asu.edu/master-information-management/index.cfm
BA 301P
wpcareymsim@asu.edu
480-965-3252

## Real Estate Development, MREDev (ARREMREDEV)

Online Degree Search Title: Real Estate Development (MRED)
Campus: TEMPE

Program Description: The Arizona State University Master of Real Estate Development (M.R.E.D.) is one of the leading programs offered through the nationally ranked and recognized W. P. Carey School of Business, in partnership with the Sandra Day O'Connor College of Law, the Herberger Institute for Design and the Arts, and the Del E. Webb School of Construction. The M.R.E.D. program offers a truly transdisciplinary approach to real estate development education through a full-immersion curriculum that explores the development process in its entirety.
The program partnerships are the key to encompassing all facets of the real estate development process. Students receive core knowledge through a transdisciplinary curriculum that offers real-world application through synthesis projects utilizing actual locations with variable situations.
During the one-year program, students learn how to locate, analyze and consider the physical, legal, economic, political and financial conditions impacting the use of property and the critical analysis required for a successful project. Graduates of the M.R.E.D. program are prepared to undertake mid- and senior-level management responsibility for small to large development and investment companies. They enter the real estate development industry with a keen awareness of developing projects that are financially viable, economically desirable, politically acceptable, environmentally respectful, socially responsible and contextually and artfully designed.

Degree Requirements: 30 credit hours and an Applied Project
The program is offered in an intense format covering two academic semesters. Students take required core course modules in a variety of formats, including:

- Face-to-face classroom instruction.
- Independent research.
- Group work.
- Weekly assignments.
- Topical quizzes.
- Comprehensive module exams to assess aggregrate knowledge.

Admission Requirements: Apply online through the ASU Graduate College.
To be eligible for admission to graduate studies, students must have 1) a bachelor's degree or the equivalent from a regionally accredited institution, and 2) a 3.00 GPA.
Additional supplemental application materials include:

- A GMAT, LSAT, GRE test score or petition for waiver (five or more years of industry relevant experience required).
- Three letters of recommendation.
- A personal statement addressing area of interest and relevancy to career goals.


## Contact Information:

Business, W. P. Carey School of
Department of Finance
http://mred.wpcarey.asu.edu/
CAM 205
mred@asu.edu
480-965-8517

## Supply Chain Management (certificate), CERT (BASCMCERT)

Online Degree Search Title: Supply Chain Management (Grad Certificate)
Campus: ONLNE
Program Description: The certificate is composed of five, three-credit online courses in supply chain management, each six weeks in length (five content weeks and one reading/final assignment completion week). The content of the courses is tightly integrated and offers a comprehensive coverage of core topics in supply chain management. The intended audiences for the certificate include working professionals who are graduates of general management undergraduate or graduate business programs who wish to supplement their degrees with focused, graduate-level courses in supply chain management, and fall into one of the following categories:

- Relatively new to supply chain management and desire a foundational knowledge of supply chain management complexities as well as a strong understanding of how companies leverage their supply chains to achieve competitive advantage.
- Experienced supply chain management professionals who wish to update their knowledge of current thinking and best practices through interaction with faculty engaged in broad-based research and consulting.

Degree Requirements: 15 credit hours including a Capstone Course (SCM 532)
The following courses are required for this certificate:
SCM 502 (3)
SCM 520 (3)
SCM 521 (3)
SCM 532 (3)
SCM 541 (3)
Admission Requirements: All applicants must submit the Graduate College online application and meet Graduate College admission requirements. In addition, applicants should have a minimum of two years full-time work experience.

## Contact Information:

Business, W. P. Carey School of
Business Administration
http://wpcarey.asu.edu/professional-development/SCM/scm.cfm
BA 456
wpcarey.execed@asu.edu
480-965-7579

## Taxation, MTax (BATAMTAX)

Online Degree Search Title: Taxation (MTax)
Campus: TEMPE

Program Description: The faculty in the School of Accountancy offer a specialized professional program leading to the Master of Taxation (M.Tax.). The M.Tax. is a specialized degree program designed to equip students with the highly technical and demanding skills required to provide tax and business advice in the private sector and to administer tax laws in the public sector of the economy. The program prepares students for positions in taxation and provides graduate-level education for tax professionals who desire to enhance their skills.

Degree Requirements: 30 credit hours including a Capstone (ACC 589)
The M.Tax. program offers two cohort-based programs; one evening, part-time program and one evening, full-time program. The part-time program is spread over the course of two academic years, and the full-time program is completed in one academic year. Applicants must complete program pre-requisites prior to admission to the M.Tax. program. Please refer to the School of Accountancy website for a current listing of required course prerequisites. Graduate-level accounting courses are only open to students admitted to the graduate program.

## Admission Requirements:

- Applicants to the M.Tax. program are required to submit an online application to the Graduate College. Complete application instructions may be obtained from the school's website.
- Applicants must submit scores from the Graduate Management Admissions Test (GMAT).
- All applicants are also required to submit the supplemental application materials required by the School of Accountancy.
- International applicants whose native language is not English must submit scores from the Test of English as a Foreign Language (TOEFL) exam.

Preference in admission is given to those with degrees in accounting, finance and business, although other exceptional candidates are considered.

## Contact Information:

Business, W. P. Carey School of
School of Accountancy
http://wpcarey.asu.edu/accounting
BA 223Q
wpcareyacc@asu.edu
480-965-3631

## W. P. Carey MBA, MBA (BACORPMBA)

Online Degree Search Title: W. P. Carey MBA - Custom Corporate Program
Campus: TEMPE

Program Description: The Custom Corporate MBA program is designed for participants from a single company. Participants are nominated to attend the program by their company, and receive a solid, core curriculum with optional specializations. The Custom Corporate MBA program offers flexible part-time delivery modes, using online, on-ground and blended courses. Possible features that can be incorporated into the custom programs are: company-specific applied projects, guest teaching from corporate leaders and intensive residential sessions.

Degree Requirements: 48 credit hours including a Capstone Course (MGT 589)
The Custom Corporate MBA program requires that students be nominated into the program by the sponsoring company.
Admission Requirements: Applicants must submit the Graduate College online application and meet Graduate College admission requirements and the guidelines established by the Custom Corporate MBA program.

## Contact Information:

Business, W. P. Carey School of
MBA Programs
http://wpcarey.asu.edu/mba/custom-corporate/index.cfm
BA 150
wpcarey.execed@asu.edu
480-965-7579

## W. P. Carey MBA, MBA (BAEVEAMBA)

Online Degree Search Title: W. P. Carey MBA - Evening Accelerated Program

## Campus: TEMPE

Program Description: The purpose of the W. P. Carey MBA is to provide a solid foundation and knowledge base in the core business disciplines, to develop analytic capabilities, decision-making and leadership skill sets essential to making sound business decisions. The curriculum is delivered in a case-based, team oriented, and discussion learning environment. Elective courses provide additional depth and breadth to enhance an area of emphasis, students' knowledge base and career goals. The Evening Accelerated MBA is designed for working professionals seeking to continue working full-time while attending school. The Evening Accelerated MBA starts in February each year and is completed in 18 months.
The MBA program is supported by each of the eight academic units within the W. P. Carey School of Business. Curriculum information can be found at the department website.

Degree Requirements: 48 credit hours including a Capstone Course (MGT 589)
While there are no business course prerequisites, potential students must demonstrate strong quantitative ability, and effective written and oral communication skills.
The core courses are designed to provide a foundation in business knowledge and skills, and must be taken in the prescribed sequence. Elective courses build upon the business core and center on the further development of an optional area of emphasis. There may be additional requirements that vary by area of emphasis. The program is completed in 18 months.
The business school does not accept graduate credits earned while students are in non-degree status and/or courses taken prior to admission to the MBA program, or taken while enrolled in another MBA program outside the W. P. Carey School of Business.
Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program and have the approval of the MBA program office.
Foreign Language Requirements
None.
Thesis Requirements
None.
Comprehensive Examination
All students must successfully complete the comprehensive requirement established by the school of business and Graduate College for the MBA. The comprehensive culminating experience is integrated with MGT 589 Strategic Management. Students passing this course with a grade of " $B$ " (3.00) or higher satisfy the comprehensive examination requirement.

## Admission Requirements:

- All applicants must submit the Graduate College online application.
- All students applying to the Evening Accelerated MBA are required to take the GMAT. The GRE will be considered on a case-bycase basis. For more information on the GMAT, see http://www.mba.com.
- Proof of English proficiency is required of all international applicants whose native language is not English. For more information, visit http://graduate.asu.edu/admissions/international/english_proficiency.
- Applicants to the Evening Accelerated MBA should have at least two years of full-time work experience by the date of enrollment.
- Applicants should submit three essays for the degree program addressing commitment, career goals, professional accomplishments, qualifications and reasons for interest in the program.
- One set of sealed, official transcripts from every college and university attended must be submitted.
- Applicants also provide two letters of recommendation commenting on their motivation, commitment, achievements, work experience and opportunity for success in the program.
- A personal interview may also be required.


## Contact Information:

Business, W. P. Carey School of
MBA Programs
http://www.wpcarey.asu.edu/mba
BA 160
wpcareymba@asu.edu
480-965-3332
W. P. Carey MBA, MBA (BAEVENMBA)

Online Degree Search Title: W. P. Carey MBA - Evening Program
Campus: TEMPE, WEST

Program Description: The purpose of the W. P. Carey School of Business MBA program is to provide a solid foundation and knowledge base in the core business disciplines, to develop analytic capabilities, decision-making and leadership skill sets essential to making sound business decisions. The curriculum is delivered in a case-based, team oriented, and discussion learning environment. Elective courses and technical certificates provide additional depth and breadth to enhance an area of emphasis, students' knowledge base and career goals. The Evening MBA is designed for working professionals seeking to continue working fulltime while attending school. The Evening MBA starts in August and is completed in 21 months.
The MBA program is supported by each of the eight academic units within the W. P. Carey School of Business.
Degree Requirements: 48 credit hours including a Capstone Course (MGT 589)
While there are no business course prerequisites, potential students must demonstrate strong quantitative ability, and effective written and oral communication skills.
The core courses are designed to provide a foundation in business knowledge and skills and must be taken in the prescribed sequence. Elective courses build upon the business core and center on the further development of an area of emphasis. There may be additional requirements that vary by area of emphasis. The program is completed in 21 months.
The business school does not accept graduate credits earned while students are in non-degree status and/or courses taken prior to admission to the MBA program, or taken while enrolled in another MBA program outside the W. P. Carey School of Business.
Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program and have the approval of the MBA program office.
Foreign Language Requirements
None.
Thesis Requirements
None.
Comprehensive Examination
All students must successfully complete the comprehensive requirement established by the school of business and Graduate College for the MBA. The comprehensive culminating experience is integrated with MGT 589 Strategic Management. Students passing this course with a grade of " $B$ " $(3.00)$ or higher satisfy the comprehensive examination requirement.

## Admission Requirements:

- All applicants must submit the Graduate College online application.
- All students applying to the Evening MBA are required to take the GMAT. The GRE will be considered on a case-by-case basis.
- Proof of English proficiency is required of all international applicants whose native language is not English.
- Applicants to the Evening MBA should have at least two years of full-time work experience by the date of enrollment.
- Applicants should submit three essays for the degree program addressing commitment, career goals, professional accomplishments, qualifications and reasons for interest in the program.
- One set of sealed, official transcripts from every college and university attended must be submitted.
- Applicants also provide two letters of recommendation commenting on their motivation, commitment, achievements, work experience and opportunity for success in the program.
- A personal interview may also be required.


## Contact Information:

Business, W. P. Carey School of
MBA Programs
http://www.wpcarey.asu.edu/mba
BA 160
wpcareymba@asu.edu
480-965-3332

## W. P. Carey MBA, MBA (BAEXECMBA)

Online Degree Search Title: W. P. Carey MBA - Executive Program
Campus: TEMPE

Program Description: The purpose of the W. P. Carey School of Business MBA program is to provide a solid foundation and knowledge base in the core business disciplines, to develop analytic capabilities and decision-making and leadership skill sets to effectively integrate decisions into the business environment. The Executive MBA is designed for managers who have significant responsibility managing people, projects and budgets. Classes begin in the fall and meet twice monthly on Fridays and Saturdays, allowing the opportunity to minimize time away from work and maximize time for studying and class preparation. The Executive MBA is completed in 21 months.

The MBA program is supported by each of the eight academic units within the W. P. Carey School of Business. Curriculum information can be found on the school's website.

Degree Requirements: 48 credit hours including a Capstone Course (MGT 589)
While there are no business course prerequisites, potential students must demonstrate strong quantitative ability, and effective written and oral communication skills.
The executive curriculum must be taken in the prescribed sequence and is augmented by a series of lectures on thought leadership and off-site learning programs, including a business and public policy course in Washington, D.C. An additional off-site course exploring issues and strategies in the global business environment is held in partnership with an international business school. The program is completed in 21 months.
The business school does not accept graduate credits earned while students are in non-degree status and/or courses taken prior to admission to the MBA program, or taken while enrolled in another MBA program outside of the W. P. Carey School of Business. Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program and have the approval of the MBA program office.
Foreign Language Requirements
None.
Thesis Requirements
None.
Comprehensive Examination
All students must successfully complete the comprehensive requirement established by the school of business and Graduate College for the MBA. The comprehensive culminating experience is integrated with MGT 589 Strategic Management. Students passing this course with a grade of " $B$ " (3.00) or higher satisfy the comprehensive examination requirement.

## Admission Requirements:

- All applicants must submit the Graduate College online application.
- Applicants applying to the Executive MBA should have significant work experience managing projects, people and budgets.
- Proof of English proficiency is required of all international applicants whose native language is not English.
- Applicants should submit three essays for the degree program addressing commitment, goals, qualifications, professional accomplishments and reasons for interest in the program.
- Applicants also provide two letters of recommendation commenting on their motivation, commitment, achievements, work experience and opportunity for success in the program.
- One set of sealed, official transcripts from every college and university attended must be submitted.
- A personal interview is required, by invitation only.


## Contact Information:

Business, W. P. Carey School of
MBA Programs
http://www.wpcarey.asu.edu/mba/exe
BA 160
wpcareymba@asu.edu
480-965-3332

## W. P. Carey MBA, MBA (BAFULLMBA)

Online Degree Search Title: W. P. Carey MBA - Full-Time Program
Campus: TEMPE
Program Description: The purpose of the W. P. Carey School of Business MBA program is to provide a solid foundation and knowledge base in the core business disciplines, to develop analytic capabilities, decision-making and leadership skill sets essential to making sound business decisions. The curriculum is delivered in a case-based, team oriented learning environment. A specialization in a functional area provides additional depth and breadth to further enhance students' knowledge base and focus career goals. The Full-time MBA is designed for individuals who want to immerse themselves in full-time graduate studies and take classes during the day. Class size in the Full-time MBA averages 50 or fewer students, and supports individual learning, promotes student-faculty interaction, and encourages personal and professional development.
The MBA program is supported by each of the eight academic units within the W. P. Carey School of Business.

Degree Requirements: 48 credit hours including a Capstone Course (MGT 589)
While there are no business course prerequisites, potential students must demonstrate strong quantitative ability, as well as effective written and oral communication skills.

The core courses are designed to provide a foundation in business knowledge and skills, and must be taken in the prescribed sequence. Elective or specialization courses build upon the business core and center on the further development of a specialization. There may be additional requirements that vary by specialization. The program is typically completed in two years, with a required internship in the summer between the first and second year of study.
The business school does not accept graduate credits earned while students are in non-degree status and/or courses taken prior to admission to the MBA program, or taken while enrolled in another MBA program outside of the W. P. Carey School of Business.
Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program and have the approval of the MBA program office.
Foreign Language Requirements
None.
Thesis Requirements
None.
Comprehensive Examination
All students must successfully complete the comprehensive requirement established by the school of business and Graduate College for the MBA. The comprehensive culminating experience is integrated with MGT 589 Strategic Management. Students passing this course with a grade of " $B$ " (3.00) or higher satisfy the comprehensive examination requirement.

## Admission Requirements:

- All applicants must submit the Graduate College online application.
- All students applying to the full-time MBA are required to take the GMAT.
- Proof of English proficiency is required of all international applicants whose native language is not English.
- Applicants to the Full-time MBA should have at least two years of full-time work experience by the date of enrollment.
- Applicants should submit three essays for the degree program addressing commitment, career goals, professional accomplishments, qualifications and reasons for interest in the program.
- One set of sealed, official transcripts from every college and university attended must be submitted.
- Applicants also provide two letters of recommendation commenting on their motivation, commitment, achievements, work experience and opportunity for success in the program.
- A personal interview is required, by invitation only.


## Contact Information:

Business, W. P. Carey School of
MBA Programs
http://www.wpcarey.asu.edu/mba
BA 160
wpcareymba@asu.edu
480-965-3332

## W. P. Carey MBA, MBA (BAONLINMBA)

Online Degree Search Title: W. P. Carey MBA - Online Program Campus: ONLNE

Program Description: The purpose of the W. P. Carey School of Business MBA program is to provide a solid foundation and knowledge base in the core business disciplines, to develop analytic capabilities, decision-making and leadership skill sets essential to making sound business decisions. The curriculum is delivered in a case-based, team oriented learning environment. Elective courses provide additional depth and breadth to enhance an area of emphasis, students' knowledge base and career goals. The Online MBA is designed for working professionals seeking to continue working full-time while attending school. The Online MBA starts in January and July and is completed in 22 months.
The MBA program is supported by each of the eight academic units within the W. P. Carey School of Business. Curriculum information can be found on school's website.

Degree Requirements: 48 credit hours including a Capstone Course (MGT 589)
While there are no business course prerequisites, potential students must demonstrate strong quantitative ability, and effective written and oral communication skills. To be successful in an online learning environment, students must also have computer proficiency and expertise in using spreadsheet, word processing and presentation software packages, e-mail and an Internet browser.
The core courses are designed to provide a foundation in business knowledge and skills and must be taken in the prescribed sequence. Elective courses build upon the business core and center on the further development of an area of emphasis. The program is typically completed in less than two years.

The business school does not accept graduate credits earned while students are in non-degree status and/or courses taken prior to admission to the MBA program, or taken while enrolled in another MBA program outside the W. P. Carey School of Business. Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program and have the approval of the MBA program office.
Foreign Language Requirements
None.
Thesis Requirements
None.
Comprehensive Examination
All students must successfully complete the comprehensive requirement established by the school of business and Graduate College for the MBA. The comprehensive culminating experience is integrated with MGT 589 Strategic Management. Students passing this course with a grade of " $B$ " (3.00) or higher satisfy the comprehensive examination requirement.

## Admission Requirements:

- All applicants must submit the Graduate College online application.
- All students applying to the Online MBA are required to take the GMAT. The GRE will be considered on a case-by-case basis.
- Proof of English proficiency is required of all international applicants whose native language is not English.
- Applicants to the Online MBA should have at least two years of full-time work experience by the date of enrollment.
- Applicants should submit three essays for the degree program addressing commitment, career goals, professional
accomplishments, qualifications and reasons for interest in the program.
- One set of sealed, official transcripts from every college and university attended must be submitted.
- Applicants also provide two letters of recommendation commenting on their motivation, commitment, achievements, work experience and opportunity for success in the program.
- A personal interview may also be required.


## Contact Information:

Business, W. P. Carey School of
MBA Programs
http://www.wpcarey.asu.edu/mba/online
BA 160
wpcareymba@asu.edu
480-965-3332

## W. P. Carey MBA, MBA (BASHANGMBA) <br> Online Degree Search Title: W. P. Carey MBA - Shanghai Program <br> Campus: TEMPE

Program Description: The W. P. Carey School of Business at Arizona State University is directly involved in the development of top leadership in China. In 2003, we launched an Executive MBA program in Shanghai, China. The program is delivered in collaboration with Shanghai National Accounting Institute, an entity founded by China's formal Premier, Mr. Zhu Rongji, and is under the governance of China's Ministry of Finance.
The business leaders emerging from this program will shape U.S.-Sino trade relationships during China's continued global expansion. These academic programs are just the cornerstone of a number of new offerings that include knowledge transfer and access to the highest level of decision makers in China.
The hallmarks of prestigious programs include two key elements: the faculty and the students. No other MBA program offers a more impressive list of faculty or students than that in the W. P. Carey School of Business China Program. The faculty includes some of the world's most influential thinkers. Internationally renowned faculty from the W. P. Carey School of Business lead scholars from other major American business schools. The students are equally impressive, in that many of those enrolled in the program are senior executive leaders of the largest state-owned enterprises in China. For more information, please go to our school's website.

Degree Requirements: 48 credit hours including a Capstone Course (MGT 589)
The curriculum consists of 12 courses. It is based on the integration of core management principle with an immersion in accounting, finance, supply chain management, service marketing, customer relation management and management of services innovation. At the core of the curriculum delivery is the emphasis on the practical applications with direct business connectivity. The curriculum also prides itself on its integration of global practices and local market characterizations so as to enable participants' ability to excel in the modern economy.

In addition, the curriculum is designed with a strong interdisciplinary focus, while achieving cycle-time efficiency. Each course will be delivered in an intensive manner over two consecutive weekends, with four full days of face-to-face instruction supplemented by online instruction materials to enable learning interactions between faculty and participants.
All students must successfully complete the comprehensive requirement established by the School of Business and Graduate College for the MBA. The comprehensive culminating experience is integrated with MGT 589 Strategic Management. Students passing this course with a grade of " $B$ " ( 3.00 on a scale of 4.00 ) or higher satisfy the comprehensive examination requirement. A thesis is not required.

Admission Requirements: All applicants are required to contact the program coordinator before submitting the Graduate College online application.

## Contact Information:

Business, W. P. Carey School of
MBA Programs
http://wpcarey.asu.edu/mba/china-program/english/index.cfm
BA 160
wpcareymba@asu.edu
480-965-4203

## Design and the Arts, Herberger Institute for

Architecture, MArch (ARARCMARCH)
Online Degree Search Title: Architecture (MArch)
Campus: TEMPE

Program Description: The Master of Architecture is an accredited professional degree program at ASU. There are two programs of study available:

- A two-year program for applicants who have completed the four-year B.S.D. in architectural studies at ASU, or an equivalent degree from another school that offers an accredited professional degree in architecture.
- A three-plus-year program for applicants with an undergraduate degree in a discipline or field other than architecture.

Both programs promote broad areas of knowledge, professional skill and a social awareness that the architect must command if architecture is to enhance contemporary life and remain an enduring and valid expression of society.

Degree Requirements: 56 credit hours including the required course (ADE 622) or 78 credit hours including the required course (ADE 622)

Two-year program
Requirements involve an average of 14 credit hours per semester. A summer internship is required after the first full year of study. Students who can adequately demonstrate competence through experience or previous academic course work for any of the specific requirements outlined below are encouraged to petition the graduate coordinator for a course substitution.
Typical Plan of Study

## First Year

Fall
ADE 521 Advanced Architectural Studio I (5)
ATE 553 Building Systems III (3)
ATE 563 Building Structures III (3)
ATE 598 Sustainability of the Built Environment (3)
Spring
ADE 522 Advanced Architectural Studio II (5)
L/APH 505 Foundation Theory Seminar (3)
ATE 556 Building Development (3)
Herberger Institute professional design elective* (3)
Summer
ARP 584 Clinical Internship (3) or ARP 598 ST: Arch Professional Practice

Second Year
Fall
ADE 621 Advanced Architectural Studio III (5)

AAD 515 Current Issues and Topics (3)
Herberger Institute professional design elective* (3)
Approved elective (3)
Spring
ADE 622 Advanced Architectural Studio IV (5)
L/AAD 652 Architectural Management II (3)
Approved elective (3)

* The list of Herberger Institute design electives can be found on the Herberger Institute for Design and the Arts website.

Elective can be taken outside the college with graduate coordinator approval.
Three-plus-year program
The three-plus-year graduate program requires 24 credit hours of deficiency course work in addition to the master's level course work, which make up the total number of 102 credit hours of approved courses and electives. For most students, this program involves 15 credit hours in the first summer and 14 to 15 credit hours in each of the subsequent six semesters. A summer internship is required after the second full year of study.
Students who can adequately demonstrate previous academic course work for any of the deficiencies are encouraged to petition the graduate coordinator for a course waiver.
Typical Program of Study
Note: Bolded courses are considered deficiencies and do not count toward official program of study.

## First Year

Summer
ADE 510 Foundation Architectural Studio (6)
ALA 102 Architecture, Landscape Architecture and Society (1st five-week session) (3)
ALA 236 Computers in Landscape Architecture (1st five-week session) (3)
APH 509 Foundation Seminar (2nd five-week session) (3)
Fall
ADE 511 Core Architectural Studio (6)
APH 313 History of Architecture I (3)
ATE 361 Building Structures I (3)
ATE 451 Building Systems I (3)
Spring
ADE 512 Core Architectural Studio (6)
APH 314 History of Architecture II (3)
ATE 452 Building Systems II (3)
ATE 462 Building Structures II (3)
After the first summer and academic year, the three-plus-year curriculum merges with the two-year curriculum and they are the same.

Admission Requirements: Applicants to the two-year program must:

- Submit a Graduate College online application and hold an undergraduate or graduate degree from a college or university recognized by ASU.
- Have completed a four-year B.S. in architectural studies or similar pre-professional degree in architecture. The bachelor's degree must be granted by an institution that offers the National Architectural Accrediting Board (NAAB) accredited degree program in architecture.
- Meet the minimum GPA requirements as established by the Graduate College.
- Provide an official copy of GRE scores (unofficial copies will not be accepted). For more information, visit the GRE website or http://www.asu.edu/uts. The Design School does not have a minimum score for admission, however, the average scores of admitted students are between 500-600 for each section.
- Additional application materials can be found online at http://sala.asu.edu/students/grad/prospective/applying/.

In addition to the above requirements, international students are required to submit an official Test of English as a Foreign Language (TOEFL) score. The minimum score for admission to the program is 100 (Internet-based), 250 (computer-based) or 600 (paperbased). Other information for international applicants can be found on the Graduate College website.
Admission to the Master of Architecture program is selective, and the Master of Architecture program does not defer admission. Students must enroll in the semester for which they are admitted, otherwise they will need to go through the entire application process again for the year in which they are applying.

Applicants may be admitted to the two-year program with deficiencies if their previous course work is not equivalent to the ASU undergraduate requirements and standards. Deficiencies must be completed prior to taking the required course(s) if necessary. Please keep in mind that this may cause the student to take longer than two years to complete the program.
A personal interview is not required; however, a candidate wishing to visit the school is welcome and should make arrangements by contacting the department.

## Contact Information:

Design and the Arts, Herberger Institute for
The Design School
http://design.asu.edu/
CDN 162D
design.master@asu.edu
480-965-1174

## Art (Art Education), MA (FAARTEDMA)

## Online Degree Search Title: Art Education (MA)

Campus: TEMPE

Program Description: The M.A. in art education is a research-oriented degree. M.A. students investigate issues in art teaching and learning from multiple perspectives, including art inquiry, studio, visual culture, development and context. The degree culminates with an original thesis study proposed and carried out by the student. Students admitted to the M.Ed. program with a major in secondary education may also elect art as the subject matter field. Students admitted to the Secondary Education M.Ed. plus certification program in the College of Teacher Education and Leadership may select Art as an area of concentration.

Degree Requirements: 30 credit hours a Thesis and a Written Comprehensive Exam (Qualifying Research Paper)
The degree program requires:

- Eighteen hours of core courses.
- Six hours of special topics on research related to integrating the teaching of studio art, art history and criticism or aesthetics.
- Six hours of research and thesis.

To meet the core requirements, students must take the following core courses:
ARE 510 Visual Culture Research (3)
ARE 520 Issues in Teaching Inquiry in Art (3)
ARE 525 Research on Art Instruction (3)
ARE 530 Issues in Teaching Studio Art (3)
ARE 535 Research on Teaching Studio Art (3)
ARE 540 Teaching Art in Cultural Contexts (3)
Before the end of the first semester of course work (six or more credit hours), a program of study must be submitted to the Graduate College. Additional program requirements are indicated in the M.A. in art education guidelines.

Admission Requirements: All applicants must submit a Graduate College online application.
An applicant must have a bachelor's degree from a regionally accredited college or university with a major of no fewer than 45 credit hours of art, including 12 hours of art history and six hours of art education. Additional hours may be required by the school.
An applicant must have a GPA of at least " $B$ " (3.00) in undergraduate course work during the junior and senior years. Applicants who do not meet these requirements must submit scores from the MAT or the GRE.
Applicants should submit:

- A formal art education research paper for review
- Resume.
- Statement of intent.
- Three letters of recommendation.

Applications are accepted throughout the year.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu

## Art (Art History), MA (FAARTHISMA) <br> Online Degree Search Title: Art History (MA) <br> Campus: TEMPE

Program Description: The M.A. in art history is a comprehensive degree designed to train students to engage with visuality in multiple ways. It offers a diverse curriculum intended to foster critical understanding of aesthetics, production, patronage and consumption of art. Eleven internationally recognized faculty offer classes across many cultures and time periods, geographies and multiple approaches and methodologies. The degree program stresses intersections between disciplines, borders, margins, points of mediation and technological developments throughout history. The graduate curriculum offers focused study in the areas of images and digital technologies, art in social and political contexts, and histories and theories of visual culture.

Degree Requirements: 30 credit hours a Thesis and a Foreign Language Exam
This program must include a minimum of 21 hours in art history, with at least 12 of these earned in 500 -level seminars. At least one course must be taken in each of the four core areas:

- Ancient/medieval.
- Modern.
- Non-Western.
- Renaissance/baroque.

Satisfactory completion of ARS 501 Methodologies and Art History is required during the first semester of residence. The remaining hours include ARS 599 Thesis, approved electives and other courses specified by the faculty.

## Admission Requirements:

- All applicants must submit a Graduate College online application.
- An applicant must have a bachelor's degree from a regionally accredited university with an undergraduate major or minor in art history, or at least four upper-division art history courses, in which a GPA of 3.00 or higher was maintained.
- GRE scores must be submitted in support of the application, along with three letters of recommendation.
- Applicants should submit one formal research paper for review.
- Applicants should submit a one-page statement of intent indicating their objectives for graduate study.

The application deadline is January 15.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
ART 102
soagrad@asu.edu
480-965-6303

## Art (Ceramics), MFA (FACERAMMFA)

Online Degree Search Title: Ceramics (MFA)
Campus: TEMPE
Program Description: The M.F.A. ceramics program seeks to provide a stimulating and challenging environment for artistic and intellectual growth. With the realization that discipline, familiarity with historical precedents, and freedom go hand in hand with creative activities, the area strives to strike a balance between the acquisition of traditional skills and the promotion of independence and innovation. Responsibility is placed on the individual student to find personally meaningful content and an effective means to express that content within the ceramic arts. The ceramics program features a complete and varied line of kilns, wheels and other equipment. In addition, graduate students enjoy private studio spaces and a graduate facility.
World-renowned faculty strive to ensure that graduates learn the techniques and concepts that will enable their work to take any direction they wish. A strong guest artist schedule enhances the program. The Ceramics Research Center at the ASU Art Museum, with its collection of more than 3,000 pieces, provides unparalleled opportunities to study and research ceramics.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition)
The 60 hours of graduate credit are subject to committee approval and must include:

- Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration.
- Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses).
- Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art.
- Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition.

Admission Requirements: All applicants must complete the Graduate College online application. A bachelor's degree from a regionally accredited college or university recognized by ASU is required.
Applications include the following components: portfolio with image list, statement of intent, current resume or curriculum vitae and three letters of recommendation.

- The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be less than 60MB each.
- The statement of intent should address the applicant's artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
- A current resume or curriculum vitae.
- Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: https://asuherberger.slideroom.com/. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is Jan. 15 for fall admissions; the school does not admit for the spring semester.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
ART 102
soagrad@asu.edu
480-965-6303

## Art (Digital Technology), MFA (FADIGITMFA)

Online Degree Search Title: Art - Digital Technology (MFA)
Campus: TEMPE

Program Description: The M.F.A. in digital technology is offered by the School of Art in collaboration with the School of Arts, Media and Engineering (AME). It is a hybrid degree that combines technological and artistic goals, and requires students with skills and experience in both realms. Applicants will be required to demonstrate accomplishment in both art and technology, particularly in having developed new digital technology for the arts. Course work will be required in both the School of Art and AME. In this field, the School of Art offers graduate level courses in digital audio, video, photography, animation, compositing and rapid prototyping.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam
Graduate credit is subject to committee approval and includes:

- Thirty-six graduate studio credit hours in the major area(s) of concentration where 18 credit hours are ART studio classes and 18 credit hours are graduate-level courses in the School of Arts, Media, and Engineering.
- Six credit hours of graduate-level art history.
- Six credit hours ART 621 Seminar.
- Six hours of ART 680 Practicum and six hours of AME 593 Applied Project, leading either to a final thesis exhibition or an applied project.

Admission Requirements: All applicants must submit a Graduate College application.
A bachelor's degree from a college or university recognized by ASU is required. All students applying for the M.F.A. must submit to the graduate coordinator:

- A portfolio of images of their work on a CD-ROM disk containing 20 JPEG files ( 1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation. If appropriate, a DVD is also acceptable.
- Three letters of recommendation.
- A current curriculum vitae.
- Statement of intent pertaining to the students educational objectives.

Applications for the digital technology concentration program must also include:

- A a statement and evidence of work demonstrating digital technology skills beyond end user applications.
- An art and digital technology resume.

The preferred method for submission is online via SLIDEROOM: https://asuherberger.slideroom.com/. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is Jan. 15 for fall admissions; the school does not admit for the spring semester.

## Contact Information:

Design and the Arts, Herberger Institute for

## School of Art

http://art.asu.edu
ART 102
soagrad@asu.edu
480-965-6303

## Art (Drawing), MFA (FADRAWMFA)

Online Degree Search Title: Drawing (MFA)
Campus: TEMPE

Program Description: The M.F.A. drawing program offers a learning environment for creative, intellectual and technical growth that leads to quality art practice and professionalism. The program encourages a wide spectrum of approaches to contemporary drawing as visual expression, ranging from traditional to innovative. Students work under the guidance and one-on-one mentorship of a large full-time faculty of active professionals who are nationally and internationally recognized. A building devoted to the drawing and painting M.F.A. program provides private graduate studios, a central gathering place, a woodshop and a computer room. The Martin Wong Painting/Drawing Studio is a dedicated space where graduate critiques and seminars are held. Visiting artists of national stature enhance the program with lectures and individual graduate critiques.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition)
The 60 hours of graduate credit are subject to committee approval and must include:

- Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration.
- Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses).
- Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art.
- Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition.

Admission Requirements: All applicants must complete the Graduate College online application. A bachelor's degree from a regionally accredited college or university recognized by ASU is required.
Applications include the following components: portfolio with image list, statement of intent, current resume or curriculum vitae and three letters of recommendation.

- The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be less than 60MB each.
- The statement of intent should address the applicant's artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
- A current resume or curriculum vitae.
- Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is Jan. 15 for fall admissions; we do not admit for the spring semester.

## Contact Information:

Design and the Arts, Herberger Institute for

## School of Art

http://art.asu.edu
ART 102
soagrad@asu.edu
480-965-6303

## Art (Fibers), MFA (FAFIBERMFA)

Online Degree Search Title: Fibers (MFA)
Campus: TEMPE
Program Description: The M.F.A. with a concentration in fibers promotes independent and guided research relevant to the relationships among materials, process, content and form. Students are challenged to use and interpret textile traditions while considering innovative and interdisciplinary approaches to contemporary art. The fibers area cultivates an environment that stimulates creative and intellectual maturity by encouraging students to discover their distinctive expression informed by knowledge and skills related to surface design, woven structures and 3-D structures. The expected outcomes of students in the Master of Fine Arts program in fibers relate to artistic commitment, professional preparation and the confidence to pursue a career as a studio artist, teacher or related position in the fibers/textile field.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition)
The 60 hours of graduate credit are subject to committee approval and must include:

- Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration.
- Three credit hours of graduate-level art history, three credit lecture course in the School of Architecture and Landscape Architecture and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses).
- Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art.
- Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition.

Admission Requirements: All applicants must complete the Graduate College online application. A bachelor's degree from a regionally accredited college or university recognized by ASU is required.
Applications include the following components: portfolio with image list, statement of intent, current resume or curriculum vitae, and three letters of recommendation.

- The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be less than 60 MB each.
- The statement of intent should address the applicant's artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
- A current resume or curriculum vitae.
- Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is January 15 for fall admissions; we do not admit for the spring semester.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
ART 102
soagrad@asu.edu
480-965-6303

## Art (Intermedia), MFA (FAMEDIAMFA)

Online Degree Search Title: Intermedia (MFA)
Campus: TEMPE
Program Description: The M.F.A. intermedia program is a conceptually driven program with an interdisciplinary approach to artmaking. Students work with experimental studio practices, performance and digital media to explore new avenues for selfexpression, collaborative practice and community action.

Led by exceptional faculty, the intermedia program covers a wide range of conceptual and media orientations reflecting the professional practices of a growing team of faculty members. Currently, emphases in performance, installation, mixed media, digital video, digital sculpture, animation, and Web art are offered. The ideal student not only is well-grounded in traditional studio practice, but is interested in exploring experimental processes.
In addition to taking courses in intermedia, students are encouraged to take advantage of the academic excellence ASU provides as a leading research university by taking classes for full credit in other programs and disciplines. Through regular visiting artist talks, seminars and one-on-one faculty mentorship, the Intermedia program offers an engaging environment for critical thinking and creative development.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition) The Program must include:

- Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration.
- Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses).
- Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art.
- Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition.

Admission Requirements: All applicants must complete the Graduate College online application. A bachelor's degree from a regionally accredited college or university recognized by ASU is required.
Applications include the following components: portfolio with image list, statement of intent, current resume or curriculum vitae and three letters of recommendation.

- The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be less than 60MB each.
- The statement of intent should address the applicant's artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
- A current resume or curriculum vitae.
- Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is Jan. 15 for fall admissions; we do not admit for the spring semester.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
ART 102
soagrad@asu.edu
480-965-6303

## Art (Metals), MFA (FAMETALMFA)

Online Degree Search Title: Metals (MFA)

## Campus: TEMPE

Program Description: The M.F.A. metals program offers a wide range of traditional and non-traditional approaches to metalworking. The program's goals are to assist students in the development of technical and conceptual ability to express their insights and ideas. We seek to generate self-motivated, self-directed, flexible artists who can problem solve and think creatively, and have a thorough familiarity with established techniques, materials and traditions of the craft. Alongside a full range of other art practices, the program provides a comprehensive approach to graduate education that combines art production, criticism, aesthetics, historic references and personal experiences, and promotes the artist as an active participant in contemporary society.
Students have the opportunity to gain knowledge and skills through additional educational opportunities that include workshops, lectures, visiting artists, internship possibilities, conferences and symposia, visits to artist studios, museums and exhibitions. ASU is located in proximity to numerous galleries and museums as well as local organizations such as the Arizona Designer Craftsmen, Metalink and the Arizona Artist-Blacksmith Association.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition)

The 60 hours of graduate credit are subject to committee approval and must include:

- Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration.
- Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses).
- Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art.
- Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition.

Admission Requirements: All applicants must complete the Graduate College online application. A bachelor's degree from a regionally accredited college or university recognized by ASU is required.
Applications include the following components: portfolio with image list, statement of intent, current resume or curriculum vitae and three letters of recommendation.

- The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be less than 60MB each.
- The statement of intent should address the applicant's artistic interests, reasons for applying to graduate school in general and teh ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
- A current resume or curriculum vitae.
- Three letters of recommendations are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is January 15 for fall admissions; we do not admit for the spring semester.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
ART 102
soagrad@asu.edu
480-965-6303

## Art (Painting), MFA (FAPAINTMFA)

Online Degree Search Title: Painting (MFA)
Campus: TEMPE
Program Description: The M.F.A. painting program offers a learning environment for creative, intellectual and technical growth that leads to quality art practice and professionalism. The program encourages a wide spectrum of approaches to contemporary painting as visual expression, ranging from traditional to innovative. Students work under the guidance and one-on-one mentorship of a large full-time faculty of active professionals who are nationally and internationally recognized. A building devoted to the drawing and painting M.F.A. program provides private graduate studios, a central gathering place, a woodshop and computer room. The Martin Wong Painting/Drawing Studio is a dedicated space where graduate critiques and seminars are held. Visiting artists of national stature enhance the program with lectures and individual graduate critiques.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition)
The program must include:

- Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration.
- Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses).
- Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art.
- Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition.

Admission Requirements: All applicants must complete the Graduate College online application. A bachelor's degree from a regionally accredited college or university recognized by ASU is required.
Applications include the following components: portfolio with image list, statement of intent, current resume or curriculum vitae and three letters of recommendation.

- The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be less than 60MB each.
- The statement of intent should address the applicant's artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
- A current resume or curriculum vitae.
- Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is Jan. 15 for fall admissions; we do not admit for the spring semester.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
ART 102
soagrad@asu.edu
480-965-6303

## Art (Photography), MFA (FAPHOTOMFA)

Online Degree Search Title: Photography (MFA)
Campus: TEMPE
Program Description: The M.F.A. (photography) program offers students a broad-based educational experience centering around light-sensitive systems. The photography faculty at ASU is significant in size and diverse in background and creative practice making possible a wide range of options for students working together in a closely knit yet rigorous educational setting. M.F.A. candidates work in 19th-century processes, a state-of-the-art digital lab, traditional black and white darkrooms and in collaboration with printmakers and intermedia artists. The program includes course work in criticism and theory as well as gallery and museum practice. The Northlight Gallery grants students the opportunity to engage with photographic artists from around the world, as well as providing experience with collections and exhibition opportunities for graduate students.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam
The 60 hours of graduate credit are subject to committee approval and must include:

- Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration.
- Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses).
- Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art.
- Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition.

Admission Requirements: All applicants must complete the Graduate College online application. A bachelor's degree from a regionally accredited college or university recognized by ASU is required.
Applications include the following components: portfolio with image list, statement of intent, current resume or c.v. and three letters of recommendation.

- The portfolio and image list should be sized with a maximum dimension of 1,024 pixels. Video files must be less than 60MB each.
- The statement of intent should address the applicant's artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1,000 words.
- A current resume or curriculum vitae.
- Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is January 15 for fall admissions; we do not admit for the spring semester.

## Contact Information:

## Art (Printmaking), MFA (FAPRINTMFA) <br> Online Degree Search Title: Printmaking (MFA) <br> Campus: TEMPE

Program Description: The M.F.A. printmaking program is an exciting, vital degree program that provides a complete studio experience with regular courses in intaglio, lithography, relief, screen-print, monotype, book arts, papermaking and other graphic applications. Accomplished faculty teach in spacious, well-equipped studios, offering a complete range of print media. While individual students are encouraged to pursue a personal direction, the faculty encourages students to become well-rounded printmakers; experiencing and understanding many media and processes including experimentation and interdisciplinary approaches to making art. No style, technique, or aesthetic approach is stressed over another, so that the individual quality of each student's work is the essential measure of achievement.
The printmaking program at ASU boasts several unique study options for graduate students including photogravure, collotype, artists' books, papermaking and digital processes for printmaking. The book arts program is one of the select programs in the country and home to the renowned Pyracantha Press as well as a significant collection of print work at the ASU Museum of Art. Interdisciplinary collaboration is encouraged and students often work with other departments in the School of Art, particularly photography and intermedia. Graduates of the printmaking program go on to careers that include teaching, studio jobs in some of the country's best fine art print publishing studios and professional artists who exhibit nationally.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition)
This program must include:

- Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration.
- Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses).
- Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art.
- Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition.

Admission Requirements: All applicants must complete the Graduate College online application. A bachelor's degree from a regionally accredited college or university recognized by ASU is required.
Applications include the following components: portfolio with image list, statement of intent, current resume or c.v. and three letters of recommendation.

- The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be less than 60MB each.
- The statement of intent should address the applicant's artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
- A current resume or curriculum vitae.
- Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is January 15 for fall admissions; we do not admit for the spring semester.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
ART 102
soagrad@asu.edu
480-965-6303

## Art (Sculpture), MFA (FASCULPMFA)

Online Degree Search Title: Sculpture (MFA)
Campus: TEMPE

Program Description: The M.F.A. sculpture program recognizes the broadly encompassing interdisciplinary nature of sculpture today. A wide range of media now fall within an expanded definition of sculpture. Directed graduate courses include interactive and kinetic sculpture, video installation, neon, architectural sculpture and foundry. While classes run the gamut of the contemporary sculpture environment, there also is an emphasis on helping students put today's creations in the context of contemporary art and the history of sculpture. Critical inquiry is augmented by courses in the art history program. Visiting artists, curators and critics connect students to the contemporary context.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition)
This program must include:

- Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration.
- Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses).
- Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art.
- Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition.

Admission Requirements: All applicants must complete the Graduate College online application.
A bachelor's degree from a regionally accredited college or university recognized by ASU is required.
Applications include the following components:

- The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be less than 60MB each.
- The statement of intent should address the applicant's artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
- A current resume or curriculum vitae.
- Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents.

The deadline to submit is January 15 for fall admissions; we do not admit for the spring semester.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
ART 102
soagrad@asu.edu
480-965-6303

## Art (Wood), MFA (FAWOODMFA)

Online Degree Search Title: Wood (MFA)
Campus: TEMPE
Program Description: The M.F.A. wood program offers a wide range of traditional and non-traditional approaches to woodworking. The program's goals are to assist students in the development of technical and conceptual ability to express their insights and ideas. We seek to generate self-motivated, self-directed, flexible artists that can problem solve and think creatively, and have a thorough familiarity with established techniques, materials and traditions of the craft. The School of Art offers one of the best equipped fine woodworking shops in the Southwest. It includes equipment for laminating, carving, turning and fabricating. Alongside a full range of other art practices, the program provides a comprehensive approach to graduate education that combines art production, criticism, aesthetics, historic references and personal experiences, and promotes the artist as an active participant in contemporary society.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition)
The 60 hours of graduate credit are subject to committee approval and must include:

- Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration.
- Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition.
- Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses).
- Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art.

Admission Requirements: All applicants must complete the Graduate College online application. A bachelor's degree from a regionally accredited college or university recognized by ASU is required.
Applications include the following components:

- A current resume or curriculum vitae.
- A portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be less than 60 MB each.
- A statement of intent should address the applicant's artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
- Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents.

The deadline to submit is Jan. 15 for fall admissions; we do not admit for the spring semester.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
ART 102
soagrad@asu.edu
480-965-6303

## Built Environment (Energy Performance \& Climate Responsive Architecture), MS (ARENERGYMS)

Online Degree Search Title: Built Environment (Energy Perf/Climate Responsive Arch) - MS

## Campus: TEMPE

Program Description: The built environment M.S. program with a concentration in energy performance and climate-responsive architecture educates students to become experts in energy efficient design and technology. The program is concerned with the relationships between climate and site, thermal and visual comfort, and energy demand and consumption. Courses in this concentration establish a basic core of knowledge of the principles of the natural energies available at the building boundary due to climate and site; thermal and optic behavior of building materials and components; passive and low-energy architectural systems for heating, cooling, and lighting; and appropriate integration with mechanical systems. Additional courses are available to support advanced study and research in a variety of related specialties.

Degree Requirements: 30 credit hours and a Thesis or 30 credit hours including the required course (ATE 593) and an Applied Project

First Year
Fall (9)
ATE 560 Building Energy Analysis (3)
ATE 521 Building Environmental Science (3)
ATE 598 Sustainability In the Built Environment (3)
Spring (9)
ATE 598 Renewable Energy Systems (3)
ATE 598 Building Energy Anaylsis II (3)
ATE 562 Experimental Evaluation(3)
ATE 591 Seminar: Energy and Climate (1)*
Second Year
Fall (9)
Environmental Control Systems (3)
Passive Heating and Cooling (3)
ATE 599 Thesis (3)

Spring (3)
ATE 599 Thesis (3)
*This is not a required courses for the degree; however, it is a recommended elective.

Admission Requirements: Applicants must submit a Graduate College online application.
Applicants must hold a baccalaureate or graduate degree from a college or university recognized by ASU, in one of the professions or fields of study outlined below:

- Individuals who hold a previous five- or six-year NAAB (National Architectural Board) accredited professional degree in architecture (B.Arch. or M.Arch.). See the NAAB website for more information.
- Individuals who are licensed landscape architects or those who have completed a four-year Bachelor of Science in landscape architecture degree, or a Master in Landscape Architecture degree. The undergradaute or gradaute degree must be granted by an institution that offers the Landscape Architectural Accreditation Board (LAAB) accredited degree program in architecture.
- Individuals who have an engineering degree (B.S. or M.S.) with a background in building sustainability issues. Mechanical and civil engineering, and construction majors are particularly suited for application to this program.
- Individuals who have a science degree (B.S. or M.S.) with a background in building sustainability issues.
- Applicants must meet the minimum GPA requirements as established by the Graduate College.
- Provide an official copy of GRE scores (unofficial copies will not be accepted). For more information, visit the GRE website or http://www.asu.edu/uts. The Design School does not have a minimum score for admission, however, the average scores of admitted students are between 500-600 for each section.
- Additional application materials can be found online at http://sala.asu.edu/students/grad/prospective/applying.
- In addition to the above requirements, international students are required to submit an official TOEFL score. The minimum score for admission to the program is 100 (Internet), 250 (computer-based), or 600 (paper-based). Other information for International applicants can be found on the Graduate College website.
- Admission to the Master of Science in building design program is selective, and the Master of Science in building design program does not defer admission. Students must enroll in the semester for which they are admitted. Otherwise, they will need to go through the entire application process again for the year in which they are applying.
- A personal interview is not required; however, a candidate wishing to visit the school is welcome and should make arrangements by contacting sala.grad@asu.edu or 480-965-1174.


## Application Deadlines

All materials must be received by The Design School and the Graduate College by Jan. 15 for fall semester consideration. Priority will be given to students who have submitted all the required application materials to both the Graduate College and The Design School by deadline of Jan. 15. The M.S. in built environment program does not admit students for the spring or summer semester.

## Contact Information:

Design and the Arts, Herberger Institute for
The Design School
http://design.asu.edu/
CDN 162D
sala.grad@asu.edu
480-965-1174

## Composition, MM (FAMCOMPMM)

Online Degree Search Title: Music Composition (MM) Campus: TEMPE

Program Description: The M.M. with a concentration in composition focuses on helping students develop the skills necessary to pursue and advance a career in music composition. Opportunities to collaborate with music scholars, theorists, performers, educators and other composers provides students with a broad and well-rounded foundation for advanced careers in music.

Degree Requirements: 32 credit hours a Thesis and a Written Comprehensive Exam or 32 credit hours an Applied Project and a Written Comprehensive Exam
Degree requirements include:

- Six hours of thesis.
- Eight hours of electives.
- Nine hours of composition.
- Nine hours of music theory and history.

The thesis is an original composition that demonstrates mastery of composing for the selected performance medium and the coherent organization of musical material.

Admission Requirements: The applicant must submit the Graduate College online application. The application for admission must be accompanied by:

- A resume.
- A one- to two-page personal statement outlining your educational and career goals.
- Three letters of recommendation from qualified persons in the field capable of addressing your background talent, and ability to complete the requested degree.
- A portfolio of three to five original works showing technical facility in composition.

The deadline for submission of complete application materials is Oct. 15 for spring admission and Dec. 1 for fall admission.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
MUSIC E167
SOMadmissions@asu.edu
480-965-5069

## Composition (Interdisciplinary Digital Media and Performance), MM (FADIGITMM)

Online Degree Search Title: Music - Interdisciplinary Dig. Media \& Perf. (MM)
Campus: TEMPE
Program Description: The M.M. with a concentration in interdisciplinary digital media and performance is designed for students who have interests and skills in unique cross sections of the arts and sciences. The degree expands the School of Music offerings to include areas beyond typical music offerings, allowing for expanded opportunities for personal growth. It also allows the School of Music and its students to be actively involved in current developments in the ever-changing field of media. The state-of-the-art media facilities of the School of Arts, Media and Engineering (AME), and its hybrid arts-engineering faculty and courses, are an invaluable asset to music students, with resources that complement existing and future courses in electronic music.

Degree Requirements: 32 credit hours a Thesis a Written Comprehensive Exam and an Oral Comprehensive Exam or 32 credit hours a Thesis and a Written Comprehensive Exam
Credit hours required for this concentration:

- Arts Media and Engineering Core (12).
- Thesis (6).
- Music History/Music Theory (8-9).
- Electives (5).
- Total (31-32).

Admission Requirements: The applicant must submit the Graduate College online application. The application for admission must be accompanied by:

- A resume.
- A well-composed statement of professional and educational intent that also addresses the transdisciplinary nature of the School of Arts, Media and Engineering.
- Three letters of recommendation from qualified persons in the field capable of addressing your background talent, and ability to complete the requested degree.
- Submission of a portfolio demonstrating entry-level competencies. The portfolio may include previously developed media products or projects and/or publications demonstrating an understanding of and involvement with digital media and computation.

The deadline for submission of complete application materials is Oct. 15 for spring admission and Dec. 15 for fall admission.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu

## Dance, MFA (FADANCEMFA)

Online Degree Search Title: Dance (MFA)
Campus: TEMPE
Program Description: The M.F.A. in dance at ASU is a highly flexible program built around nurturing, creative practice which offers a solid foundation in practical and theoretical course work. ASU School of Dance seeks individuals who are self-motivated, have clear and demonstrated objectives and are willing to explore new possibilities in the field of dance and beyond.The School of Dance actively welcomes a diversity of applicants, especially returning professionals, with experience and/or interest in:

- Community-based practice.
- Creative practice.
- Dance and technology.
- Dance history.
- Dance making.
- Dance science and somatics.
- Educational and professional partnerships.
- Interdisciplinary and/or cross-cultural approaches.
- Philosophy and criticism.

Degree Requirements: 60 credit hours and a Bound Document
Incoming students are encouraged to take foundational course work, which has been designed to be a broad and fundamental preparation for future careers in:

- Arts administration.
- Community partnerships.
- High schools.
- Higher education.
- Independent artistic practice.
- Private studios.
- Professional dance and performance companies.
- Technology.
- Social service.
- Curator/Presenting.
- The wellness industry.

The M.F.A. applied project in dance, worth eight credits, serves as the culminating experience in the graduate dance curriculum. Students have the opportunity to select the format and structure of their project in conjunction with their M.F.A. committee. Conceived as a bridge to career, the project should take into consideration the future goals of the student.
Flexibility in program design is strongly encouraged. The program recognizes and encourages individual strengths and professional experience that may strongly affect the student.

Admission Requirements: To apply for admission to the M.F.A. in dance program, a student must complete an online application and supply official copies of all transcripts from previous institutions to the Graduate College.
The School of Dance requires:

- A current resume.
- DVD of recent work, including one solo piece and one group piece.
- Three letters of recommendation from professionals in the field.
- A personal artistic statement that relates to department core values as described by the Learning Lens.


## Contact Information:

Design and the Arts, Herberger Institute for
School of Dance T
http://dance.asu.edu/
PEBE 170A
dance@asu.edu
480-965-1208

## Dance (Interdisciplinary Digital Media and Performance), MFA (FADANDIMFA)

Online Degree Search Title: Dance - Interdisciplinary Digital Media \& Perform. (MFA)
Campus: TEMPE
Program Description: The concentration in interdisciplinary digital media and performance (IDMP) expands on the strength of the School of Dance in the specific area of mediated practice, and provides a highly select group of graduate students with a more rigorous, in-depth and fully supported opportunity to specialize in dance and interdisciplinary digital arts.
The interdisciplinary classes and research activities of the transdisciplinary Arts, Media and Engineering Program (AME) that form part of this concentration give students access to the high-end media technology studios of AME, to project funding and to interdisciplinary collaborators. The M.F.A. applied project, which may involve producing original creative work, presenting a lecture demonstration on a body of research or another form of original work, acts as the culminating experience of the program.

Degree Requirements: 60 credit hours and a Bound Document
The degree involves three years of residency:

- A final M.F.A. applied project (8).
- A written document.
- An oral defense.
- Eighteen credit hours of required course work in the concentration taught by AME.
- Fifteen credits of electives.
- Nineteen required credit hours in the School of Dance.
- Ongoing showings of work.

The current M.F.A. is normally accomplished during three years of residency in the School of Dance. Ongoing showings of creative work are required. Foundational course work is offered in areas of:

- Creative Practice.
- Pedagogy.
- Professional development.
- Movement Practices.
- Technology.
- Theory.

Students enrolled in the program specialize in areas related to independent research. The M.F.A. applied project, which may involve producing original choreography, presenting a lecture demonstration on a body of research or another form of original work, acts as the culminating experience of the program. Thesis presentation, a final written document, reflective in nature, as well as an oral defense complete the process.

Admission Requirements: To apply for admission to the M.F.A. program in dance, interdisciplinary digital media and performance, a student must complete an online application and supply official copies of all transcripts from previous institutions to the Graduate College.
The School of Dance requires:

- A current resume.
- DVD of recent work, including one solo piece and one group piece.
- Three letters of recommendation from professionals in the field.
- A personal artistic statement that relates to School of Dance core values as described by the Learning Lens.


## Contact Information:

Design and the Arts, Herberger Institute for
School of Dance T
http://dance.asu.edu/
PEBE 170A
dance@asu.edu
480-965-1208
Design (Arts, Media and Engineering), MSD (ARDESAMMSD)
Online Degree Search Title: Design (Arts, Media and Engineering) (MSD)
Campus: TEMPE

Program Description: The M.S.D. with a concentration in arts, media and engineering focuses on the integration and application of humanistic, technical and design knowledge in tackling complex problems. The concentration provides opportunities for exploring experiential media systems through theoretical analysis, creative engagement and practical development. Graduating students will be prepared to lead innovative design and development initiatives at corporations and other institutions at the forefront of media culture.

Degree Requirements: 36 credit hours and a Thesis or 36 credit hours including the required course (DSC 593) and an Applied Project
Students may choose to complete their graduate work by way of a thesis or an applied project. A master's thesis is a scholarly endeavor that demonstrates the ability of the author to do supervised research and intellectual writing. The applied project is somewhat different. It includes both a project and a written document and is a scholarly endeavor that demonstrates the ability of the designer to do supervised research and present substantial evidence of the ability to apply research creatively to a design situation.

Admission Requirements: Applicants to the M.S.D. program must hold a bachelor's degree in graphic design, industrial design, interior design or a related design discipline. When applying for admission, applicants must declare one of seven concentrations:

- Arts, media and engineering.
- Health care and healing environments.
- Industrial design.
- Interaction design.
- Interior design.
- New product innovation.
- Visual communication design.

Further information can be found in the program description on the school admissions website.
Admission is a two-step process. Although applicants fill out one application through the online Graduate College application process, they must be admitted into both the concentration in the M.S.D. program and the Graduate College.
M.S.D. Program Requirements

- A 3.00 or higher undergraduate GPA.
- Minimum score of 550 on the paper-based Test of English as a Foreign Language (TOEFL) or 213 on the computer-based test or 83 on the internet-based test, for international students whose native language is not English.
- GRE scores are not required.
- Additional application materials can be found online at http://sala.asu.edu/students/grad/prospective/applying/.
- Applicants wishing to be considered for teaching or research assistantships (T.A./R.A.) should submit an additional statement outlining areas in which they feel competent to serve as a teaching or research assistant and inexpensive copies of samples of work that will not be returned. All interested applicants can apply for a T.A. position online. The link to the application will be provided on the M.S.D. website.
- All international teaching or graduate assistants whose primary language is not English are required to be certified in their English language abilities. Those individuals whose native language is not English will be required to submit a Speaking Proficiency English Assessment Kit (SPEAK) score, which is administered at ASU. Students also have the option of completing the Test of Spoken English (TSE), administered directly by the Educational Testing Service (ETS). For this group, no Personnel Action form (PAF) will be signed until this examination has been successfully completed.
- The ASU American English and Culture Program (AECP) will certify all T.A.s who take the SPEAK. International students whose primary language is not English will not be permitted to serve as T.A.s unless they have AECP certification. Information about AECP certification can be found online at http://global.asu.edu/aecp.


## Contact Information:

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## Design (Design of Healthcare and Healing Environments), MSD (ARHHEMSD)

Online Degree Search Title: Healthcare and Healing Environments (MSD)
Campus: TEMPE

Program Description: The concentration in health care and healing environments is focused on factors that impact the design and planning of health care facilities and healing environments, especially the integration of evidence-based design, sustainable science and best practices benchmarks with planning health care facilities. This multidisciplinary program integrates the principles of medical and clinical innovations, business administration, interior architecture, human health services, communication studies, architecture and behavioral and engineering sciences. Students in this program will be mentored by local health care design consultants, teaming with nursing students, working directly with real clients and corresponding with forward-thinking health care research centers.

Degree Requirements: 36 credit hours and a Thesis or 36 credit hours including the required course (DSC 593) and an Applied Project
Students may choose to complete their graduate work by way of a thesis or an applied project. A master's thesis is a scholarly endeavor that demonstrates the ability of the author to do supervised research and intellectual writing. The applied project is somewhat different. It includes both a project and a written document and is a scholarly endeavor that demonstrates the ability of the designer to do supervised research and present substantial evidence of the ability to apply research creatively to a design situation.

Admission Requirements: Applicants to the M.S.D. program must hold a bachelor's degree in graphic design, industrial design, interior design or a related design discipline. When applying for admission, applicants must declare one of seven concentrations:

- Arts, media and engineering.
- Health care and healing environments.
- Industrial design.
- Interaction design.
- Interior design.
- New product innovation.
- Visual communication design.

Further information can be found in the program description on the school website.
Admission is a two-step process. Although applicants fill out one application through the online Graduate College application process, they must be admitted into both the M.S.D. program and the Graduate College.
M.S.D. Program Requirements

- A 3.00 or higher undergraduate GPA.
- Minimum score of 550 on the paper-based Test of English as a Foreign Language (TOEFL) or 213 on the computer-based test or 83 on the internet-based test, for international students whose native language is not English.
- GRE scores are not required.
- Additional application materials can be found online at http://sala.asu.edu/students/grad/prospective/applying/.
- Applicants wishing to be considered for teaching or research assistantships (T.A./R.A.) should submit an additional statement outlining areas in which they feel competent to serve as a teaching or research assistant and inexpensive copies of samples of work that will not be returned. All interested applicants can apply for a T.A. position online. The link to the application will be provided on the M.S.D. website.
- All international teaching or graduate assistants whose primary language is not English are required to be certified in their English language abilities. Those individuals whose native language is not English will be required to submit a Speaking Proficiency English Assessment Kit (SPEAK) score, which is administered at ASU. Students also have the option of completing the Test of Spoken English (TSE), administered directly by the Educational Testing Service (ETS). For this group, no Personnel Action form (PAF) will be signed until this examination has been successfully completed.


## Contact Information:

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## Design (Industrial Design), MSD (ARINDDEMSD)

Online Degree Search Title: Industrial Design (MSD)
Campus: TEMPE

Program Description: The M.S.D. with a concentration in industrial design is meant for individuals interested in advanced studies in human factors, history, theory, criticism and methodology, design processes and technology. This concentration develops an understanding of contemporary industrial design issues through specialized research and design skills. It also prepares the graduate student for a career in industrial design education.

Degree Requirements: 36 credit hours and a Thesis or 36 credit hours including the required course (DSC 593) and an Applied Project
Students may choose to complete their graduate work by way of a thesis or an applied project. A master's thesis is a scholarly endeavor that demonstrates the ability of the author to do supervised research and intellectual writing. The applied project is somewhat different. It includes both a project and a written document and is a scholarly endeavor that demonstrates the ability of the designer to do supervised research and present substantial evidence of the ability to apply research creatively to a design situation.

Admission Requirements: Applicants to the M.S.D. program must hold a bachelor's degree in graphic design, industrial design, interior design or a related design discipline. When applying for admission, applicants must declare one of seven concentrations:

- Arts, media and engineering.
- Health care and healing environments.
- Industrial design.
- Interaction design.
- Interior design.
- New product innovation.
- Visual communication design.

Further information can be found in the program description on the school website.
Admission is a two-step process. Although applicants fill out one application through the online Graduate College application process, they must be admitted into both the concentration in the M.S.D. program and the Graduate College.
M.S.D. Program Requirements

- A 3.00 or higher undergraduate GPA.
- Minimum score of 550 on the paper-based Test of English as a Foreign Language (TOEFL) or 213 on the computer-based test or 83 on the internet-based test, for international students whose native language is not English.
- GRE scores are not required.
- Additional application materials can be found online at http://sala.asu.edu/students/grad/prospective/applying/.
- Applicants wishing to be considered for teaching or research assistantships (T.A./R.A.) should submit an additional statement outlining areas in which they feel competent to serve as a teaching or research assistant and inexpensive copies of samples of work that will not be returned. All interested applicants can apply for a T.A. position online. The link to the application will be provided on the M.S.D. website.
- All international teaching or graduate assistants whose primary language is not English are required to be certified in their English language abilities. Those individuals whose native language is not English will be required to submit a Speaking Proficiency English Assessment Kit (SPEAK) score, which is administered at ASU. Students also have the option of completing the Test of Spoken English (TSE), administered directly by the Educational Testing Service (ETS). For this group, no Personnel Action form (PAF) will be signed until this examination has been successfully completed. The ASU American English and Culture Program (AECP) will certify all T.A.s who take the SPEAK.


## Contact Information:

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## Design (Interaction Design), MSD (ARDSCIMSD)

Online Degree Search Title: Design (Interaction Design) (MSD)
Campus: TEMPE
Program Description: Interaction design is about people and how people connect through products and services. The interaction design concentration focuses on the study of principles, tools, complexities and change that prepare students for endeavors such as
creating effective physical and virtual shopping, creating effective information retrieval systems and numerous such human-spatial interactions. Design principles guide the students in the methods of creating dynamic, expressive and communicative forms.

Degree Requirements: 36 credit hours and a Thesis or 36 credit hours including the required course (DSC 593) and an Applied Project
Students may choose to complete their graduate work by way of a thesis or an applied project. A master's thesis is a scholarly endeavor that demonstrates the ability of the author to do supervised research and intellectual writing. The applied project is somewhat different. It includes both a project and a written document and is a scholarly endeavor that demonstrates the ability of the designer to do supervised research and present substantial evidence of the ability to apply research creatively to a design situation.

Admission Requirements: Applicants to the M.S.D. program must hold a bachelor's degree in graphic design, industrial design, interior design or a related design discipline. When applying for admission, applicants must declare one of seven concentrations:

- Arts, media and engineering.
- Health care and healing environments.
- Industrial design.
- Interaction design.
- Interior design.
- New product innovation.
- Visual communication design.

Further information can be found in the program description on the school Web page.
Admission is a two-step process. Although applicants fill out one application through the online Graduate College application process, they must be admitted into both the concentration in the M.S.D. program and the Graduate College.
M.S.D. Program Requirements

- A 3.00 or higher undergraduate GPA.
- Minimum score of 550 on the paper-based Test of English as a Foreign Language (TOEFL) or 80 on the Internet-based test, for international students whose native language is not English.
- GRE scores are not required.
- Additional application materials can be found online at http://sala.asu.edu/students/grad/prospective/applying/.
- Applicants wishing to be considered for teaching or research assistantships (T.A./R.A.) should submit an additional statement outlining areas in which they feel competent to serve as a teaching or research assistant and inexpensive copies of samples of work that will not be returned. All interested applicants can apply for a T.A. position online. The link to the application will be provided on the M.S.D. website.
- All international teaching or graduate assistants whose primary language is not English are required to be certified in their English language abilities. Those individuals whose native language is not English will be required to submit a Speaking Proficiency English Assessment Kit (SPEAK) score, which is administered at ASU. Students also have the option of completing the Test of Spoken English (TSE), administered directly by the Educational Testing Service (ETS). For this group, no Personnel Action form (PAF) will be signed until this examination has been successfully completed.
- The ASU American English and Culture Program (AECP) will certify all T.A.s who take the SPEAK.


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## Design (Interior Design), MSD (ARINTDEMSD)

Online Degree Search Title: Interior Design (MSD)
Campus: TEMPE

Program Description: The M.S.D. with a concentration in interior design is meant for individuals interested in advanced studies in facilities planning and management, history, theory, criticism and methodology, and human factors. This concentration develops an understanding of contemporary interior design issues through specialized research and design skills. It also prepares the graduate student for a career in interior design education.

Degree Requirements: 36 credit hours and a Thesis or 36 credit hours including the required course (DSC 593) and an Applied Project
Students may choose to complete their graduate work by way of a thesis or an applied project. A master's thesis is a scholarly endeavor that demonstrates the ability of the author to do supervised research and intellectual writing. The applied project includes both a project and a written document, and is a scholarly endeavor that demonstrates the ability of the designer to do supervised research and present substantial evidence of the ability to creatively apply research to a design situation.

Admission Requirements: Applicants to the M.S.D. program must hold a bachelor's degree in graphic design, industrial design, interior design or a related design discipline. When applying for admission, applicants must declare one of seven concentrations:

- Arts, media and engineering.
- Health care and healing environments.
- Industrial design.
- Interaction design.
- Interior design.
- New product innovation.
- Visual communication design.

Further information can be found in the program description on the school website.
Admission is a two-step process. Although applicants fill out one application through the online Graduate College application process, they must be admitted into both the M.S.D. program and the Graduate College.
M.S.D. Program Requirements

- A 3.00 or higher undergraduate GPA.
- Minimum score of 550 on the paper-based Test of English as a Foreign Language (TOEFL) or 213 on the computer-based test or 83 on the internet-based test, for international students whose native language is not English.
- GRE scores are not required.
- Additional application materials can be found online at http://sala.asu.edu/students/grad/prospective/applying/.
- Applicants wishing to be considered for teaching or research assistantships (T.A./R.A.) should submit an additional statement outlining areas in which they feel competent to serve as a teaching or research assistant and inexpensive copies of samples of work that will not be returned. All interested applicants can apply for a T.A. position online. The link to the application will be provided on the M.S.D. website.
- All international teaching or graduate assistants whose primary language is not English are required to be certified in their English language abilities. Those individuals whose native language is not English will be required to submit a Speaking Proficiency English Assessment Kit (SPEAK) score, which is administered at ASU. Students also have the option of completing the Test of Spoken English (TSE), administered directly by the Educational Testing Service (ETS). For this group, no Personnel Action form (PAF) will be signed until this examination has been successfully completed.


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## Design (New Product Innovation), MSD (ARDSCNMSD)

Online Degree Search Title: Design (New Product Innovation) (MSD)
Campus: TEMPE
Program Description: The M.S.D. with a concentration in new product innovation is a research-oriented graduate degree. In this degree program, students will apply the concepts learned in the core and required courses through the execution of an applied project, which could be the design and development of a new product, a new method of doing design research, new design guidelines for medical devices, etc. The focus is on application, and the student will present evidence of knowledge of principles in new product innovation, strategy for implementation or methods of design evaluation. Students will present the projects through a design presentation, executive summary and project document.

Degree Requirements: 36 credit hours including the required course (DSC 593) and an Applied Project
This project-based concentration teaches graduate students about the role of design and innovation in the process of new product development within the context of a quickly evolving global economy.

Students complete their graduate work with an applied project. It includes both a project and a written document and is a scholarly endeavor that demonstrates the ability of the designer to do supervised research and present substantial evidence of the ability to creatively apply research to a design opportunity.

Admission Requirements: Applicants to the M.S.D. program must hold a bachelor's degree in graphic design, industrial design, interior design or a related design discipline. When applying for admission, applicants must declare one of seven concentrations:

- Arts, media and engineering.
- Health care and healing environments.
- Industrial design.
- Interaction design.
- Interior design.
- New product innovation.
- Visual communication design.

Further information can be found in the program description on the school's website.
Admission is a two-step process. Although applicants fill out one application through the online Graduate College application process, they must be admitted into both the concentration in the M.S.D. program and the Graduate College.
M.S.D. Program Requirements

- A 3.00 or higher undergraduate GPA.
- Minimum score of 550 on the paper-based Test of English as a Foreign Language (TOEFL) or 213 on the computer-based test or 83 on the internet-based test, for international students whose native language is not English.
- GRE scores are not required.
- Additional application materials can be found online at http://sala.asu.edu/students/grad/prospective/applying/.
- Applicants wishing to be considered for teaching or research assistantships (T.A./R.A.) should submit an additional statement outlining areas in which they feel competent to serve as a teaching or research assistant and inexpensive copies of samples of work that will not be returned. All interested applicants can apply for a T.A. position online. The link to the application will be provided on the M.S.D. website.
- All international teaching or graduate assistants whose primary language is not English are required to be certified in their English language abilities. Those individuals whose native language is not English will be required to submit a Speaking Proficiency English Assessment Kit (SPEAK) score, which is administered at ASU. Students also have the option of completing the Test of Spoken English (TSE), administered directly by the Educational Testing Service (ETS). For this group, no Personnel Action form (PAF) will be signed until this examination has been successfully completed.


## Contact Information:

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## Design (Visual Communication Design), MSD (ARVCDMSD)

Online Degree Search Title: Design (Visual Communication Design) (MSD)
Campus: TEMPE

Program Description: The M.S.D. with a concentration in visual communication design is meant for individuals interested in advanced studies in visual language, history, theory, criticism and methodology, design processes and technology. This concentration develops an understanding of contemporary graphic design issues through specialized research and design skills. It also prepares the graduate student for a career in graphic design education.

Degree Requirements: 36 credit hours and a Thesis or 36 credit hours including the required course (DSC 593) and an Applied Project
Students may choose to complete their graduate work by way of a thesis or an applied project. A master's thesis is a scholarly endeavor that demonstrates the ability of the author to do supervised research and intellectual writing. The applied project is somewhat different. It includes both a project and a written document and is a scholarly endeavor that demonstrates the ability of the designer to do supervised research and present substantial evidence of the ability to apply research creatively to a design situation.

Admission Requirements: Applicants to the M.S.D. program must hold a bachelor's degree in graphic design, industrial design, interior design or a related design discipline. When applying for admission, applicants must declare one of seven concentrations:

- Arts, media and engineering.
- Health care and healing environments.
- Industrial design.
- Interaction design.
- Interior design.
- New product innovation.
- Visual communication design.

Further information can be found in the program description on the school's website.
Admission is a two-step process. Although applicants fill out one application through the online Graduate College application process, they must be admitted into both the concentration in the M.S.D. program and the Graduate College.
M.S.D. Program Requirements

- A 3.00 or higher undergraduate GPA.
- Minimum score of 550 on the paper-based Test of English as a Foreign Language (TOEFL) or 213 on the computer-based test or 83 on the internet-based test, for international students whose native language is not English.
- GRE scores are not required.
- Additional application materials can be found online at http://sala.asu.edu/students/grad/prospective/applying/.

Applicants are required to submit the following materials with their application in addition to Graduate College requirements:

- A mandatory statement of intent, using the required form found the school's website, which will include the following points:
- Intended concentration.
- Proposed research topic. What will be your research focus? Why is this research important to you, the design community and the general population?
- Proposed mentor for intended research. Faculty biographies can be found on the school website.
- Personal academic background and professional experience that has prepared you for or will support your proposed research topic.
- Three letters of recommendation from persons who are qualified to comment on your potential in the selected concentration. Students will provide the names and contact information of three referees at the time of their online application. Referees will receive an e-mail with a link to the online letter of recommendation to complete. Students are able to see which referees have already completed their recommendation by logging into the My ASU system and viewing their "To Do" list. Once a referee has submitted the letter of recommendation, the referee's name will be removed from the "To Do" list. All letters must be in English.
- Applicants wishing to be considered for teaching or research assistantships (T.A./R.A.) should submit an additional statement outlining areas in which they feel competent to serve as a teaching or research assistant and inexpensive copies of samples of work that will not be returned. All interested applicants can apply for a T.A. position online. The link to the application will be provided on the M.S.D. website.
- All international teaching or graduate assistants whose primary language is not English are required to be certified in their English language abilities. Those individuals whose native language is not English will be required to submit a Speaking Proficiency English Assessment Kit (SPEAK) score, which is administered at ASU. Students also have the option of completing the Test of Spoken English (TSE), administered directly by the Educational Testing Service (ETS). For this group, no Personnel Action form (PAF) will be signed until this examination has been successfully completed.


## Contact Information:

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## Design, Environment and the Arts, PHD (ARENVDEPHD)

Online Degree Search Title: Design, Environment and the Arts (PhD)
Campus: TEMPE
Program Description: The Doctor of Philosophy in design, environment and the arts is an individualized institute-wide interdisciplinary degree that integrates graduate courses and faculty research expertise with concentrations in design; health care and healing environments; history, theory and criticism; and urban design. Broad in scope, the program is at the cutting edge of
creating new knowledge in architecture, design and the arts. It complements interdisciplinary research in other disciplines within the university. The program provides research experience for students wishing to pursue careers in industry as members of interdisciplinary design teams on environmental and energy issues, as well as for those wishing to teach in the architecture, design or the arts fields.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation Students must be thoroughly familiar with design and the arts and are expected to demonstrate a high level of academic maturity before being admitted to the program. Up to 30 credit hours from a previously awarded master's degree can count towards the requirements of the doctoral program.
Of the 54 credit hours remaining after the master's degree, 12 must be dissertation credit and 12 may be research. These 24 hours plus the remaining 30 hours must be completed after admission to the program. No transfer credits are allowed to fulfill the 54-credit-hour minimum requirement completed after admission to the program.
The student is required to take 15 credit hours in the area of concentration and a minimum of nine credit hours of specialized course work outside the area of concentration; a minimum of six credit hours in current research and research methods is required. Each student entering the doctoral program is required to submit a plan of study during the first year.

Admission Requirements: Students are admitted to the doctoral program only upon completion of a master's degree in architecture, graphic design, industrial design, interior design, landscape architecture, fine arts or upon the demonstration of equivalent standing. Students must be familiar with design and the arts and will be expected to demonstrate a high level of academic maturity before being admitted to the program.
The doctoral executive committee evaluates the applications and supporting materials during the spring for fall semester admissions. Admission decisions are based on the compatibility of the applicant's career goals with the purpose of the degree program, the research mission of the institute and the research interests of faculty, previous academic training and performance, GRE scores, recommendation letters and the ability of the potential mentor to devote time to the student.
The recommendations of the committee are forwarded to the program director for approval. Upon the written recommendation from the program director, the dean of the Graduate College will notify all applicants in writing of the admission decision. In addition to submitting the Graduate College online application and meeting Graduate College requirements, applicants must submit the following Doctor of Philosophy application requirements online at the time of application. The application will be considered incomplete if one of these items is missing.

- A statement of purpose summarizing career objectives and the reasons for pursuing doctoral education.
- An indication of proposed area of concentration (design, history, theory, and criticism, or health care and healing environments).
- An indication of a potential mentor in the Herberger Institute for Design and the Arts. We recommend that you e-mail the faculty member(s) that you feel have related research interests to introduce yourself and to inquire about their availability to be a mentor to you.
- Three letters of recommendation (preferably academic, although could be professional). Students will provide the names and contact information of three recommenders at the time of their online application. Recommenders will recieve an e-mail with a link to the on line letter of recommendation to complete. Students are able to see which recommenders have already completed their recommendation by logging into the MyASU system and viewing their "To Do" list. Once a recommender has submitted the letter of recommendation, the recommender's name will be removed from the "To Do" list. All letters must be in English.
- A sample of sole-authored written work in English or any other evidence relevant to admission to the program (i.e., master's thesis, research paper, or published articles).
- GRE scores.

A Test of English as a Foreign Language (TOEFL) score of at least 100 iBT or 600 PBT or an overall International English Language Testing System (IELTS) band score of 7.50 , with no individual band below 7.00, is required of all applicants whose native language is not English. International applicants who are interested in receiving funding as teaching assistants must take the Speaking Proficiency English Assessment Kit (SPEAK), administered at ASU, and become certified. Additional information is available on the department website.

## Contact Information:

Design and the Arts, Herberger Institute for
Dean, Herberger Institute for Design and the Arts
http://herbergerinstitute.asu.edu/degrees/phd_environmental/
CDN 162
design.grad@asu.edu
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## Design, Environment and the Arts (Digital Culture in Design), PHD (HIENVDGPHD) <br> Online Degree Search Title: Design, Environment and the Arts (Digital Culture in Design) (PhD) <br> Campus: TEMPE

Program Description: The Ph.D. in design, environment and the arts with a concentration in digital culture focuses on the role of computational systems in enhancing creativity and the quality of human design. Graduates of the program should be thinkers as well as doers; they should learn to question the existing paradigms that govern the digital world as they impact design and the arts; they should be able to analyze systematically how digital tools affect the way designers and artists think, conceptualize, create and evaluate their designs and artwork; and as a result, be able to come to a unique synthesis, leading the way in these fields. This concentration will primarily explore the impact of digital culture on how built environments, products and visual communications are designed and analyzed by design professionals and are utilized by their intended audience. Students should to be able to systematically question existing paradigms and ontology's of digital tools, evaluate the new paradigms that emerge as a result of digital culture, and propose new frameworks for design disciplines. Issues such as user interface design for new products, computer simulation of performance of buildings and products, effects of digital tools on architectural form giving, digital design processes, better incorporation of human factors into design tools, usability and interaction design are some examples of faculty expertise and areas of focus.

Degree Requirements: 84 credit hours, a Prospectus, a Written Comprehensive Exam, an Oral Comprehensive Exam and a Dissertation.
The Ph.D. in design, environment and the arts with a concentration in digital culture requires the following:

- Required Ph.D. core courses (6).
- Required concentration core courses (12).
- Research and approved electives (24).
- 799 dissertation (12).
- A previously awarded master's degree or approved relevant course work (30).

Students must be thoroughly familiar with design and the arts and are expected to demonstrate a high level of academic maturity before being admitted to the program. Up to 30 credit hours from a previously awarded master's degree can count towards the requirements of the doctoral program.
Of the 54 credit hours remaining after the master's degree, 12 must be dissertation credit and 12 may be research. These 24 hours plus the remaining 30 hours must be completed after admission to the program. No transfer credits are allowed to fulfill the 54-credit-hour minimum requirement completed after admission to the program.
The student is required to take 15 credit hours in the area of concentration and a minimum of nine credit hours of specialized course work outside the area of concentration; a minimum of six credit hours in current research and research methods is required. Each student entering the doctoral program is required to submit a plan of study during the first year.

Admission Requirements: Students are admitted to the doctoral program only upon completion of a degree in architecture, graphic design, industrial design, interior design, landscape architecture or fine arts, or upon the demonstration of equivalent standing. Students must be familiar with design and the arts and will be expected to demonstrate a high level of academic maturity before being admitted to the program.
The doctoral executive committee evaluates the applications and supporting materials during the spring for fall semester admissions. Admission decisions are based on the compatibility of the applicant's career goals with the purpose of the degree program, the research mission of the institute and the research interests of faculty, previous academic training and performance, GRE scores, recommendation letters and the ability of the potential mentor to devote time to the student.
The recommendations of the committee are forwarded to the program director for approval. Upon the written recommendation from the program director, the dean of the Graduate College will notify all applicants in writing of the admission decision. In addition to submitting the Graduate College online application and meeting Graduate College requirements, applicants must submit the following Doctor of Philosophy application requirements online at the time of application. The application will be considered incomplete if one of these items is missing:

- A statement of purpose summarizing career objectives and the reasons for pursuing doctoral education.
- An indication of proposed area of concentration (design, history, theory and criticism, or health care and healing environments).
- An indication of a potential mentor in the Herberger Institute for Design and the Arts. We recommend that you e-mail the faculty member(s) that you feel have related research interests to introduce yourself and to inquire about their availability to be a mentor to you.
- Three letters of recommendation (preferably academic, although could be professional). Students will provide the names and contact information of three recommenders at the time of their online application. Recommenders will receive an e-mail with a link to the online letter of recommendation to complete. Students are able to see which recommenders have already completed their recommendation by logging into the MyASU system and viewing their "To Do" list. Once a recommender has submitted the letter of recommendation, the recommender's name will be removed from the "To Do" list. All letters must be in English.
- A sample of sole-authored written work in English or any other evidence relevant to admission to the program (i.e., master's thesis, research paper or published articles).
- GRE scores (required).

A Test of English as a Foreign Language (TOEFL) score of at least 100 iBT or 600 PBT or an overall International English Language Testing System (IELTS) band score of 7.50 , with no individual band below 7.00 , is required of all applicants whose native language is not English (http://graduate.asu.edu/admissions/international/english proficiency). International applicants who are interested in receiving funding as teaching assistants must take the Speaking Proficiency English Assessment Kit (SPEAK), administered at ASU, and become certified. Additional information is available on the department website.
Minimum of a bachelor's degree (or equivalent) or a graduate degree from a regionally accredited College or University. Bachelor's degree must be in the field of architecture, graphic design, industrial design, interior design, landscape architecture, arts media, or engineering.
Minimum of a 3.00 cumulative GPA (scale is $4.00=$ "A") in the last 60 hours of a student's bachelor's degree program.
Identification of a proposed research topic, or list of possible topics, that align(s) with the research mission of the Ph.D. program and the research interests of faculty.
Student must have identified a Ph.D. program faculty member who has agreed to serve as a mentor.

## Contact Information:

Design and the Arts, Herberger Institute for
Dean, Herberger Institute for Design and the Arts
http://herbergerinstitute.asu.edu/degrees/phd_environmental/
CDN 162
design.grad@asu.edu
480-727-8782

## Environmental Design/Planning (Healthcare \& Healing Environments), PHD (ARENHHEPHD)

Online Degree Search Title: Environmental Design/Planning (Healthcare and Healing Environments) (PHD) Campus: TEMPE

Program Description: The health care and healing environments concentration of the Doctor of Philosophy in design, environment and the arts focuses on the integration of evidence-based design, sustainable science and best practices benchmarks when planning health care facilities. Facility-related responsibilities supported by this area cluster into seven functional work units:

- Facilities analysis (physical and environmental).
- Human factors and user needs.
- Interior planning and design.
- Programming (long-range planning).
- Research methodologies.
- Space management/planning.
- Strategic planning.

This multidisciplinary program integrates the principles of medical and clinical innovations, interior architecture, human health services, communication studies, architecture, and behavioral and engineering sciences. Students in this program will be mentored by local health care design consultants, teaming with nursing students, working directly with real clients and corresponding with forward-thinking health care research centers. Graduating students will be able to address health care environments on multiple levels, effectively communicate with clinicians, apply evidence based research techniques, and address contemporary issues facing the health care industry. Upon graduation, students may pursue advanced positions in the following arenas:

- Elite consulting firms as facility programmers.
- Large health care systems and corporations as strategic planners.
- Leading manufacturers and vendors as expert representatives.
- Planning divisions in architectural and planning firms as medical planners.
- Research centers as decision makers.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation Students will be required to complete program requirements detailed below:

- Required core courses (6).
- Required concentration courses (18).
- Elective courses (18).
- Dissertation (12).
- Previously completed a master's degree (30).

If the student has not completed a master's degree, elective courses approved by the supervisory committee may substitute.

Admission Requirements: Ideal candidates must already hold a master's degree in design, interior design, architecture, nursing or other related fields. A statement of intent will express interest in the health care research/design concentration. If students come in with no design or health care background, they must take certain deficiency courses. In addition to meeting Graduate College admission requirements, applicants must submit the following items:

- The Graduate College online application.
- A minimum of three letters of reference.
- A sample of written work and any other evidence relevant to admission to the program.
- A statement of purpose (summarizing career objectives and the reasons for pursuing a doctoral education, as well as indicating the proposed area of concentration and a potential mentor in the Herberger Institute for Design and the Arts).
- A proposed mentor and concentration form.
- GRE scores.
- A Test of English as a Foreign Language (TOEFL) score of at least 600 (paper) or 100 (iBT), or an overall IELTS band score of 7.5, with no individual band below 7.00, is required of all applicants whose native language is not English. International applicants who are interested in receiving funding as teaching associates must take the Speaking Proficiency English Assessment Kit (SPEAK) test administered at ASU and become certified.


## Contact Information:

Design and the Arts, Herberger Institute for
The Design School
http://sala.asu.edu/degrees/grad/hdi/degrees.php
CDN 162
design.grad@asu.edu

## Landscape Architecture, MLA (ARLDEMLA)

Online Degree Search Title: Landscape Architecture (MLA)
Campus: TEMPE
Program Description: The M.L.A. at ASU prepares individuals for the independent professional practice of landscape architecture and research in various aspects of the field including geology and hydrology; project and site planning; landscape design, history and theory; environmental design; application law and regulations; and professional responsibilities and standards.
The program leverages the arid urban context and rapidly urbanizing landscape of the Phoenix metropolitan region. In response to global depletion of natural resources, global warming and other population-impacted ecological conditions, the curriculum is focused on issues of sustainable landscape urbanism. Students are encouraged to pursue a joint degree with the school's M.S. in building design and/or the Master of Urban Design program.
Applicants who already hold a bachelor's degree in another field should apply to the three-plus-year M.L.A. program.

Degree Requirements: 56 credit hours and a Thesis or 56 credit hours including a Capstone Course (MLA 622) or 56 credit hours including the required course (LDE 593) and an Applied Project

## Master of Landscape Architecture Program Two-Year Degree Requirements

First Year (Fifth Year)
Fall (14)
LDE 521 Advanced Architectural Studio I (5)
LTC 563 Planting Design (3)
LPH 513 Research in Landscape Architecture Seminar (3)
ATE 598 Sustainability of the Built Environment (3)
Spring (14)
LDE 522 Advanced Landscape Architectural Studio (5)
LTC 546 LA Alternative Technologies and Materials (3)
LPH 612 Landscape Architecture Research Methods (3)
LTC 598 ST: Urban Ecological Design (3)
Summer
LAP 584 Clinical Internship (3)
Second Year (Sixth Year)
Fall (14)

LDE 621 Advanced Landscape Architectural Studio (5)/L/APH 515 Current Topics and Issues (3)
L/APH 515 Current Topics adn Issues (3)
LPH 613 Landscape Architecture Seminar (3)
Herberger Institute for Design and the Arts professional graduate design elective* (3)
Spring (11)
LDE 622 Advanced Landscape Architectural Studio (5) or LDE 599 Thesis (5) or LDE 593 Applied Project; culminating experience will be selected based upon MLA faculty guidance and approval
L/AAD 652 Professional Practice (3)
LTC 598 ST Urban Landscape Water Systems and Management (3)
Total Graduate Hours in Program: 56 credit hours

* The list of Herberger Institute for Design and the Arts design electives can be found on the institute's website: http://sala.asu.edu/.

Master of Landscape Architecture Program Three-Plus-Year Requirement
Note: Bolded courses are considered deficiencies and do not count toward official program of study.
First Year
Summer
LDE 590 Foundation Architectural Studio (6)
ALA 102 Architecture, Landscape Architecture and Society (first five-week session) (3)
ALA 236 Computers in Landscape Architecture (first five-week session) (3)
APH 509 Foundation Seminar (second five-week session) (3)
Fall
LDE 511 Core Architectural Studio I (6)
LPH 310 History of Landscape Architecture (3)
LTC 342 Landscape Implementation-Grading (3)
LTC 598 ST: Natural Factors (3)
Spring
ADE 512 Core Landscape Architectural Studio (6)
LPH 311 Contemporary Landscape Architecture (3)
LTC 344 Landscape Implementation-Construction (3)
LTC 494 Plant Materials (3)
After the first summer and academic year, the three-plus-year curriculum merges with the two-year curriculum and they are the same.

Admission Requirements: Admissions Requirements to the Two-Year Program
Applicants must:

- Hold an undergraduate or graduate degree from a college or university recognized by ASU.
- Have completed a four-year B.S. in landscape or be a licensed landscape architect. The bachelor's degree must be granted by an institution that offers the Landscape Architectural Accreditation Board (LAAB) accredited degree program in landscape architecture.
- Meet the minimum GPA requirements as established by the Graduate College.
- Provide official copy of GRE scores (unofficial copies will not be accepted). The school does not have a minimum score for admission; however, the average scores of admitted students are between 500-600 for each section.
- International students are required to submit an official Test of English as a Foreign Language (TOEFL) score, minimum score for admission is 100 (Internet-based), 250 (computer-based) or 600 (paper-based).
- Additional application materials can be found online at http://sala.asu.edu/students/grad/prospective/applying/.


## Admissions Requirements to the Three-Plus-Year Program

Applicants must:

- Submit an online Graduate College application and all of the materials outlined above.
- Apply and begin the program in the summer.
- Hold an undergraduate or graduate degree from a college or university recognized by ASU.
- Have earned a bachelor's degree in a field other than architectural studies leading to the LAAB-accredited program.
- Meet the minimum GPA requirements as established by the Graduate College.
- Provide an official copy of GRE scores (unofficial copies will not be accepted). The school does not have a minimum score for admission; however, the average scores of admitted students are between 500-600 for each section.
- Additional application materials can be found online at http://sala.asu.edu/students/grad/prospective/applying/.


## Contact Information:

Design and the Arts, Herberger Institute for
The Design School
http://design.asu.edu/
CDN 162
sala.grad@asu.edu
480-965-1174

## Media Arts and Sciences, PHD (FAMASPHD) <br> Online Degree Search Title: Media Arts and Sciences (PhD) <br> Campus: TEMPE

Program Description: Media, Arts and Sciences Ph.D. students train in translating, transporting and combining knowledge across disciplines for the development of innovative experiential media systems and accompanying theoretical models. The degree structure includes transdisciplinary media courses through the School of Arts, Media and Engineering (AME), elective-course credits relating to the student's research interests, and substantial research and dissertation hours devoted to collaborative research within the AME network. Active participation in AME interdisciplinary research teams allows Media, Arts and Sciences Ph.D. students to gain and contribute expertise in knowledge fusion for digital media.

Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation
Thirty of the 39 required course credits will be from the transdisciplinary media courses offered by the School of Arts, Media and Engineering (AME). All students will be required to take a minimum of two courses under each of the five constituting areas of experiential media ( 30 hours). The selection of the two courses under the introductory category will depend on the student.

Admission Requirements: Applicants will be required to submit:

- A Graduate College online application.
- Official transcripts of all undergraduate and graduate course work (if applicable).
- Official GRE scores.
- Curriculum vitae.
- Statement of purpose.
- Three letters of recommendation and a portfolio of supporting material.

Additionally, the statement of purpose should explain in a concise and persuasive manner how the student's educational, professional and personal experiences inform their research and creative interests as well as elaborating on any aspect of their background that supports candidacy to the AME program.
Each applicant must demonstrate entry-level competencies. This can be demonstrated primarily through a portfolio. The portfolio may include previously developed media products or projects and/or publications demonstrating an understanding of and involvement with digital media and computation. Entry-level competency can also be partially demonstrated through course work and may include such courses as:

- Advanced computer programming.
- Computer graphics and animation.
- Computer music.
- Digital design.
- Film theory.
- Interactive technologies.
- Media authoring tools.
- Media theory.
- Multimedia systems.
- Signal processing.


## Contact Information:

Design and the Arts, Herberger Institute for
Arts, Media and Engineering Sch T
http://ame.asu.edu
BYENG 395
ameed@asu.edu
480-965-9438

## Music (Conducting), DMA (FACONDDMA)

Online Degree Search Title: Conducting (DMA)
Campus: TEMPE
Program Description: The School of Music D.M.A. conducting program prepares highly-qualified musicians to become conductors and scholars, emphasizing a thorough knowledge of repertory, knowledge of historical and analytical issues, an understanding of efficient, effective rehearsal technique and a clear, expressive conducting technique. Doctoral conducting students receive considerable individual attention and have regular opportunities to rehearse and conduct a variety of ensembles.

Degree Requirements: 90 credit hours a Research Paper a Written Comprehensive Exam and an Oral Comprehensive Exam Only 30 hours from a master's degree may be counted toward the requirements for this program. Once admitted to a D.M.A. degree program, a student is required to be enrolled continuously, excluding summer sessions, until all requirements for the degree have been fulfilled. In general, the D.M.A. degree student should expect to spend at least the equivalent of three academic years beyond the bachelor's degree in the program. A minimum of two semesters must be spent in continuous full-time residence at ASU. At least 54 hours must be completed in residence at ASU. The conducting concentration requires the completion of research papers/projects in conjunction with performances (one of which must be a lecture-recital).

Admission Requirements: The applicant must submit the Graduate College online application. Students seeking admission normally hold the M.M. Applicants with other degrees are considered if they have received graduate training similar to that normally expected in a M.M. program. The application for admission must be accompanied by:

- Scores for the GRE (quantitative, verbal and analytical) or the MAT. The GRE examination in music is not acceptable for admission to the doctoral program.
- A curriculum vitae documenting at least three years of appropriate experience in the field.
- A well-composed statement of professional and educational intent. This statement should contain a brief review of your professional and educational background and academic and professional goals.
- Three letters of recommendation from qualified persons in the field capable of addressing your background talent, and ability to complete the requested degree.
- A clear DVD of conducting in rehearsal settings. For orchestral conducting, the DVD should also include conducting in a performance setting.
The deadline for submission of complete application materials is October 15 for spring admission and December 1 for fall admission. After review of complete application materials, an applicant may be invited for a live audition.


## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
Music E167
somadmissions@asu.edu
480-965-3371

## Music (Ethnomusicology), MA (FAETHNMA)

Online Degree Search Title: Ethnomusicology (MA)
Campus: TEMPE
Program Description: The M.A. with a concentration in ethnomusicology focuses on the systematic scholarly study of the history and study of various ethnomusicological topics. The faculty comprises leading scholars in a variety of world music expressions.

Degree Requirements: 30 credit hours a Thesis a Written Comprehensive Exam an Oral Comprehensive Exam and a Foreign Language Exam
At least 20 credit hours of this program must be in the field of ethnomusicology or related fields, including six credit hours of thesis and five or six credit hours in music theory. A passing grade on the foreign language reading exam in French or German is required for graduation.

Admission Requirements: In addition to the ASU Graduate College requirements and application form, interested students must submit:

- Evidence of scholarly achievement or potential (e.g., a term paper).
- Letters of recommendation from two qualified persons in the field.
- A one-to-two-page personal statement explaining the relationship between the student's professional and/or personal goals and admission into the M.A. program.


## Contact Information:

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School of Music
http://music.asu.edu
MUSIC E167
SOMadmissions@asu.edu
480-965-5069

## Music (Interdisciplinary Digital Media and Performance), DMA (FAINTDDMA)

Online Degree Search Title: Music - Interdisciplinary Dig. Media \& Perf. (DMA)
Campus: TEMPE

Program Description: The D.M.A. with a concentration in interdisciplinary digital media and performance is designed for students who have interests and skills in unique cross sections of the arts and sciences. The degree expands the School of Music offerings to include areas beyond typical music offerings, allowing for expanded opportunities for personal growth. It also allows the School of Music and its students to be actively involved in current developments in the ever-changing field of media. The state-of-the-art media facilities of the School of Arts, Media and Engineering (AME), and its hybrid arts-engineering faculty and courses, are an invaluable asset to music students, with resources that complement existing and future courses in electronic music.

Degree Requirements: 90 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The program requires 36 hours in arts, media and engineering; 30 hours in music studies; and 24 hours in research and dissertation.

Admission Requirements: The applicant must submit the Graduate College online application. The application for admission must be accompanied by:

- Scores for the GRE (quantitative, verbal and analytical) or the MAT. The GRE examination in Music is not acceptable for admission to the doctoral program.
- A curriculum vitae.
- A well-composed statement of professional and educational intent that also addresses the transdisciplinary nature of the School of Arts, Media and Engineering Program. Applicants should explain in a concise and persuasive manner how their educational, professional and personal experiences inform their research and creative interests, writing on any aspect of their background that supports candidacy to the program.
- Three letters of recommendation from qualified persons in the field capable of addressing your background talent, and ability to complete the requested degree.
- Submission of three original works showing technical facility in composition. Letters of recommendation from two qualified persons in the field. Material may include scores, recordings of performances, electronic tapes and/or videotapes, depending on the media involved. Recent works are preferred.
- Additional application materials that address the hybrid nature of the School of Arts, Media and Engineering should also be submitted. The deadline for submission of complete application materials is Oct. 15 for spring admission and Dec. 15 for fall admission.


## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://ame.asu.edu
MUSIC E167
SOMadmissions@asu.edu
480-965-5069

## Music (Music Composition), DMA (FACOMPDMA)

Online Degree Search Title: Music Composition (DMA)
Campus: TEMPE
Program Description: The D.M.A. is a professional program designed for outstanding composition students preparing for professional careers, including teaching positions at the university level. The concentration in composition provides extensive faculty interaction as well as opportunities to develop advanced skills in traditional and contemporary compositional techniques.

Opportunities to collaborate with music scholars, theorists, performers, educators and other composers provides students with a broad and well-rounded foundation for advanced careers in music.

Degree Requirements: 90 credit hours a Foreign Language Exam a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
Only 30 hours from a previously awarded master's degree can be counted toward the 90 hour requirement.
Once admitted to a D.M.A. program, a student is expected to be enrolled continuously, excluding summer sessions, until all requirements for the degree have been fulfilled. In general, the D.M.A. student should expect to spend at least the equivalent of three academic years beyond the bachelor's degree in the program. A minimum of two semesters must be spent in continuous fulltime residence at ASU. At least 54 hours must be completed in residence at ASU. The music composition concentration requires the creation of a significant original work of music (considered to be a dissertation) and either two article-length research papers or a substantial paper.

Admission Requirements: The applicant must submit the Graduate College online application. Students seeking admission normally hold the M.M. Applicants with other degrees are considered if they have received graduate training similar to that normally expected in a M.M. program. The application for admission must be accompanied by:

- Scores for the GRE (quantitative, verbal and analytical) or the MAT. The GRE examination in Music is not acceptable for admission to the doctoral program.
- A curriculum vitae documenting at least three years of appropriate experience in the field.
- A well-composed statement of professional and educational intent. This statement should contain a brief review of your professional and educational background and academic and professional goals.
- Three letters of recommendation from qualified persons in the field capable of addressing your background talent, and ability to complete the requested degree.
- A portfolio of at least three original works showing technical facility in composition and presenting evidence of accomplishments as a composer. Material may include scores, recordings of performances, electronic tapes and/or videotapes, depending on the media involved. Recent works are preferred.

The deadline for submission of complete application materials is Oct. 15 for spring admission and Dec. 1 for fall admission.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
MUSIC E167
somadmissions@asu.edu
480-965-3371

## Music (Music Education), PHD (FAMUSEDPHD)

Online Degree Search Title: Music (Music Education) PhD
Campus: TEMPE
Program Description: The Ph.D. in music is a scholarly research degree. Graduates of the Ph.D. in music typically serve as faculty members at colleges or universities; as scholars or researchers; as music and arts administrators for education, arts and civic and government organizations; and as public policy advisors to education organizations, arts providers and/or civic and government agencies.
The concentration in music education includes highly specialized study in music education, support studies with scholars and artists in the School of Music and other schools in the Herberger Institute for Design and the Arts, and opportunities for cross-disciplinary elective study with faculty in schools and colleges across the ASU campuses. A plan of study is designed by the student in consultation with the faculty to support a research trajectory identified by the student.
Research conducted by students in the music education concentration aims to reexamine, interrogate and broaden the canon of music education, and to expand the traditional boundaries of music scholarship by challenging methodological and disciplinary boundaries. The degree concludes with dissertation research.

Degree Requirements: 90 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The degree requirements are distributed as follows:

- Core requirements (10).
- Elective credits (music, music education and related studies) (29).
- Concentration (music education courses, including research) (30).
- Internship (3).
- Research (6).
- Dissertation (12).

Admission Requirements: The applicant must submit the Graduate College online application. Students seeking admission must have completed a bachelor's degree (or equivalent) or a graduate degree from a regionally accredited college or university in music education prior to beginning this doctoral program. The application for admission must be accompanied by:

- Scores for the GRE (quantitative, verbal and analytical) or the MAT. The GRE examination in music is not acceptable for admission to the doctoral program.
- A curriculum vitae documenting at least three years of appropriate experience in the field.
- A well-composed statement of professional and educational intent. This statement should contain a brief review of your professional and educational background and academic and professional goals.
- Three letters of recommendation from qualified persons in the field capable of addressing your background talent, and ability to complete the requested degree.
- A clear DVD recording of teaching (rehearsal or class teaching), focusing specifically on instruction. Additional recordings may be submitted to reflect your ability to refine music in a performance setting.
- An example of scholarly work or publication, preferably a paper from an upper-level undergraduate course or a graduate course, or an article or document you have written.

Applications are accepted year round and reviewed on a rolling basis. To ensure prompt processing of your application, please email SOMadmissions@asu.edu after you have submitted your application. An interview, via telephone or in person, with at least three members of the music education doctoral faculty will be scheduled after review of complete application materials. An interview, via telephone or in person, with at least three members of the music education doctoral faculty will be scheduled after review of complete application materials.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu/
MUSIC E167
SOMadmissions@asu.edu
480-965-5069

## Music (Music History and Literature), MA (FAMHISTMA)

Online Degree Search Title: Music History and Literature (MA)
Campus: TEMPE

Program Description: The M.A. with a concentration in music history and literature focuses on the systematic scholarly study of a broad range of musicological styles and eras. Opportunities exist to study a broad range of areas including American music, musical cultures of the American Southwest, music in popular cultures and Western European art music.

Degree Requirements: 30 credit hours a Thesis a Written Comprehensive Exam an Oral Comprehensive Exam and a Foreign Language Exam

- A minimum of 30 credit hours of graduate credit is required, of which at least two-thirds must be in the field of music history and literature and five or six credit hours in music theory.
- Music History Core (9).
- Music Theory (5-6).
- Music History Electives (7-8).
- Thesis (6).
- Other Electives (2)
- A passing grade on the foreign language examination in French or German is required for graduation.

Admission Requirements: In addition to the ASU Graduate College requirements and online application, interested students must submit:

- A resume.
- A one- to two-page personal statement outlining your educational and career goals.
- Three letters of recommendation from qualified persons in the field capable of addressing your background talent, and ability to complete the requested degree.
- An example of scholarly work or publication, preferably a paper from an upper-level undergraduate course, or an article or document you have written.

Applications are accepted year round and reviewed on a rolling basis. To ensure prompt processing of your application, please email SOMadmissions@asu.edu after you have submitted your application.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
MUSIC E167
SOMadmissions@asu.edu
480-965-5069

## Music (Performance), DMA (FAPERFDMA)

Online Degree Search Title: Music Performance (DMA)
Campus: TEMPE
Program Description: The D.M.A. is a professional program designed for advanced musicians desiring high-levels of performance instruction/experience as well as preparation for teaching positions at the university level. The concentration in performance provides extensive faculty and guest artist interaction as well as opportunities to develop advanced skills in traditional and contemporary pedagogy. Opportunities to collaborate with music scholars, theorists, composers, educators and other performers provides students with a broad and well-rounded foundation for advanced careers in music.

Degree Requirements: 90 credit hours a Research Paper a Written Comprehensive Exam an Oral Comprehensive Exam and a Foreign Language Exam (Enter "Waived Requirement" in the second Foreign Language box) or 90 credit hours a Research Paper a Written Comprehensive Exam an Oral Comprehensive Exam and two Foreign Language Exams

Only 30 hours from a master's degree will be counted toward the 90 hour requirement.
Once admitted to a D.M.A. program, a student is requires to be enrolled continuously, excluding summer sessions, until all requirements for the degree have been fulfilled. In general, the D.M.A. student should expect to spend at least the equivalent of three academic years beyond the bachelor's degree in the program. At least two semesters must be spent in continuous full-time residence at ASU. At least 54 hours must be completed in residence at ASU.
The performance concentration requires at least three recitals after admission to the program and a research paper/project. All candidates must enroll for a total of 24 credit hours in research (MUP 792), and solo performance (MUP 796).

Admission Requirements: The applicant must submit the Graduate College online application. Students seeking admission normally hold the M.M. degree. Applicants with other degrees are considered if they have received graduate training similar to that normally expected in a M.M. degree program. The application for admission must be accompanied by:

- Scores for the GRE (quantitative, verbal and analytical) or the MAT. The GRE examination in Music is not acceptable for admission to the doctoral program.
- A curriculum vitae.
- A well-composed statement of professional and educational intent. This statement should contain a brief review of your professional and educational background and academic and professional goals.
- Three letters of recommendation from qualified persons in the field capable of addressing your background talent, and ability to complete the requested degree.
- A list of repertoire studied and/or performed after high school, including the title of the work, role (if applicable), and full name of the composer. The list should be divided into two sections: Works studied and works publicly performed.
- Voice applicants only: A prescreening audition video recording is required to be considered for an invitation for a live audition.

Voice applicants: The deadline for submission of complete application materials is Oct. 15 for spring admission and Dec. 1 for fall admission. After review of complete application materials, an applicant may be invited for a live audition. Instrumental and keyboard applicants: The deadline for submission of complete application materials is Oct. 15 for spring admission and Dec. 15 for fall admission. A live audition will be scheduled after receipt of complete application materials. In the event a live audition is not possible, an audition DVD/CD may be submitted. If a recorded audition is approved for admission, applicants will be granted "regular admission with deficiencies" or "provisional admission" status until an on-campus audition can be arranged during the first week of classes during the first semester of study.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
MUSIC E167
SOMadmissions@asu.edu
480-965-5069

## Music Education, MM (FAMUSEDMM) <br> Online Degree Search Title: Music Education (MM) <br> Campus: TEMPE

Program Description: The M.M. in music education is designed for individuals interested in music teaching and learning in public and private schools, community education settings, early childhood programs and adult education. Practicing teachers as well as community musicians and music educators interested in advanced studies in music teaching and learning may enroll. Students may elect courses in each part of the degree program and can design a course of study that meets specific music education interests and needs. The degree provides opportunities to study full-time, part-time (through evening courses), in the summers only, or by combining full-time, part-time and summer study. Full-time students may complete the degree in as little as one year.

Degree Requirements: 32 credit hours and a Written Comprehensive Exam
Six credits may be transferred from another regionally accredited graduate institution. Up to nine credits may be taken prior to admission.

- Music Education Core (10).
- Musicianship Core (10).
- Specialization (12).

Admission Requirements: A bachelor's degree in music education or teacher certification is required for admission to the M.M. in music education. The applicant must submit the Graduate College online application. The application for admission must be accompanied by 1) a resume, and 2) three letters of recommendation from qualified persons in the field capable of addressing your background talent, and ability to complete the requested degree. Applications are accepted year round and reviewed on a rolling basis. To ensure prompt processing of your application, please e-mail SOMadmissions@asu.edu after you have submitted your application.

## Contact Information:

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480-965-5069

## Music Therapy, MM (FAMTHERMM)

Online Degree Search Title: Music Therapy (MM)
Campus: TEMPE
Program Description: The graduate degree in music therapy provides music therapists graduate-level study in the theory and practice of music therapy culminating in a graduate clinical project or thesis. The degree also fosters an expanded research perspective in music therapy, emphasizing community partnerships, community-based music therapy program development, and external funding. Candidates for the M.M. in music therapy must hold the credential Music Therapist Board Certified or similar international music therapy credential.

Degree Requirements: 33 credit hours and a Thesis or 33 credit hours and an Applied Project

- Music Therapy Core courses (14).
- Music History and Music Theory courses (8).
- Concentration courses (11).

Admission Requirements: The applicant must submit the Graduate College online application. Applicants with a bachelor's degree in music therapy may apply for the master's degree in music therapy. Applicants with any other bachelor's degree must apply for the master's degree in clinical music therapy.The application for admission must be accompanied by:

- A resume.
- Three letters of recommendation from qualified persons in the field capable of addressing your background talent, and ability to complete the requested degree.
- Audition in functional music skills, involving the demonstration of advanced guitar accompaniment skills, piano accompaniment in several styles, improvisation skills and vocal abilities. An audition DVD may be submitted.

Applications are accepted year round and reviewed on a rolling basis. To ensure prompt processing of your application, please email SOMadmissions@asu.edu after you have submitted your application. An in-depth interview emphasizing the applicant's music therapy philosophy, research activities and clinical interests will be scheduled after receipt of complete application materials. A phone interview may be arranged.

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## Music Therapy (Clinical Music Therapy), MM (HICMTMM)

Online Degree Search Title: Music Therapy (Clinical Music Therapy) (MM) Campus: TEMPE

Program Description: The Master of Music in music therapy with a concentration in clinical music therapy is designed to provide interested students with the academic course work to become board-certified music therapists through the American Music Therapy Association. This is a practical entry level certification program degree designed for students with a bachelor's degree in any music discipline (e.g., performance, education, theory, arts in music), but without prior certification in music therapy.

Degree Requirements: 33 credit hours including a Capstone (MUE 584)
The requirements for this concentration are:

- Core courses (12).
- Concentration courses (15).
- Culminating experience (6).

Admission Requirements: The applicant must submit the Graduate College online application. Applicants with a bachelor's degree in music therapy may apply for the master's degree in music therapy. Applicants with any other bachelor's degree must apply for the master's degree in clinical music therapy. The application for admission must be accompanied by:

- A resume.
- Three letters of recommendation from qualified persons in the field capable of addressing your background talent, and ability to complete the requested degree.
- Audition in functional music skills, involving the demonstration of advanced guitar accompaniment skills, piano accompaniment in several styles, improvisation skills and vocal abilities. An audition DVD may be submitted.

Applications are accepted year round and reviewed on a rolling basis. To ensure prompt processing of your application, please email SOMadmissions@asu.edu after you have submitted your application. An in-depth interview emphasizing the applicant's music therapy philosophy, research activities and clinical interests will be scheduled after receipt of complete application materials. A phone interview may be arranged.

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## Performance (Collaborative Piano), MM (FACPIANOMM)

Online Degree Search Title: Piano, Collaborative (MM)
Campus: TEMPE
Program Description: Students majoring in collaborative piano work with all instrumental and vocal areas, concentrating on collaborative endeavors such as duo recitals and chamber music. Students also work on specific skills for their instrument while developing the knowledge and abilities to be skilled and sensitive musical collaborators. Opportunities to collaborate with music scholars, theorists, composers, educators and other performers provides students with a broad and well-rounded foundation for advanced careers in music.

Degree Requirements: 32 credit hours and a Written Comprehensive Exam
Degree requirements include:

- Eighteen credit hours in collaborative piano and performance.
- Fourteen credit hours of music history, theory and electives.
- At least one year of college-level instruction in either French, German, or Italian and at least one of the following are required:
- One semester of diction in each of the two other languages.
- One semester of language instruction in each of the two other languages.

Language deficiencies must be made up during the first year of study.
Admission Requirements: The applicant must submit the Graduate College online application. The application for admission must be accompanied by:

- A resume.
- Three letters of recommendation from qualified persons in the field capable of addressing your background talent, and ability to complete the requested degree.
- A list of repertoire studied and/or performed after high school, including the title of the work, role (if applicable), and full name of the composer. The list should be divided into two sections: Works studied and works publicly performed.

Instrumental and keyboard applicants: The deadline for submission of complete application materials is October 15 for spring admission and December 15 for fall admission. A live audition will be scheduled after receipt of complete application materials. Recorded auditions are acceptable but must be in accordance with repertoire requirements. While DVDs are preferred for recorded auditions, CDs are acceptable.

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## Performance (Music Theatre/Opera Performance), MM (FAMUTPOMM)

Online Degree Search Title: Music Theatre/Opera Performance (MM)
Campus: TEMPE
Program Description: The M.M. with a concentration in music theatre (emphasis areas: music theatre performance, opera performance or performance direction) stresses study, individual practice, class work and rehearsals that come together in the productions of the Lyric Opera Theatre, our performance ensemble. Every production is fully produced with sets, costumes, lighting and full orchestration. Opportunities to collaborate with music scholars, theorists, composers, educators and other performers provides students with a broad and well-rounded foundation for advanced careers in music.

Degree Requirements: 32 credit hours and a Written Comprehensive Exam
Degree requirements for the music theatre and opera emphases include 12 hours of study in the concentration area, eight hours of private voice instruction and 12 hours in music history, music theory and electives. Sixteen hours of college-level credit in more than one foreign language, chosen from French, German and Italian, are also required for graduation. Degree requirements for the music
direction emphasis include 15 hours of study in the concentration area, four hours of private keyboard instruction and 13 hours of music history, music theory and electives.

Admission Requirements: The applicant must submit the Graduate College online application. The application for admission must be accompanied by:

- A resume.
- Three letters of recommendation from qualified persons in the field capable of addressing your background talent, and ability to complete the requested degree.
- Performance applicants only: A prescreening audition video recording is required to be considered for an invitation for a live audition.
- Direction applicants only: Applicants are required to send in a CD containing their performance of three piano pieces drawn from different historical periods. In addition, applicants are strongly recommended to submit a DVD containing either excerpts from a performance of a musical for which they served as music director, or a DVD of a concert performance in which the candidate was the conductor. The piano prescreening CD is mandatory; the conducting DVD is optional.

The deadline for submission of complete application materials is Oct. 15 for spring admission and Dec. 1 for fall admission. After review of complete application materials, an applicant may be invited for a live audition.

## Contact Information:

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## Performance (Performance Pedagogy), MM (FAPPEDMM)

Online Degree Search Title: Performance Pedagogy (MM)
Campus: TEMPE
Program Description: The M.M. with a concentration in performance pedagogy stresses both the performance and teaching of major Western art music. Students work on specific performance skills while developing the knowledge and abilities to be music pedagogues in their area. Opportunities to collaborate with music scholars, theorists, composers, educators and other performers provides students with a broad and well-rounded foundation for advanced careers in music.

Degree Requirements: 32 credit hours and a Written Comprehensive Exam
Foreign Language Requirement

- None for instrumental or piano.
- For voice, 16 hours of college-level credit in more than one foreign language, chosen from French, German or Italian.

Admission Requirements: The applicant must submit the Graduate College online application. The application for admission must be accompanied by:

- A resume.
- Three letters of recommendation from qualified persons in the field capable of addressing your background talent, and ability to complete the requested degree.
- A list of repertoire studied and/or performed after high school, including the title of the work, role (if applicable), and full name of the composer. The list should be divided into two sections: Works studied and works publicly performed.
- Piano applicants only: A DVD demonstration of teaching is required for admission. The DVD should consist of two lessons (in English) no fewer than 30 minutes each and involve students of contrasting levels, if possible. Group teaching is acceptable for half of the demonstration. This teaching demonstration DVD may also serve as the teaching DVD for graduate assistantship consideration described above. Only one DVD is required.
- Voice applicants only: A prescreening audition video recording is required to be considered for an invitation for a live audition.

Voice applicants: The deadline for submission of complete application materials is Oct. 15 for spring admission and Dec. 1 for fall admission. After review of complete application materials, an applicant may be invited for a live audition.
Instrumental and keyboard applicants: The deadline for submission of complete application materials is October 15 for spring admission and December 15 for fall admission. A live audition will be scheduled after receipt of complete application materials.

Recorded auditions are acceptable but must be in accordance with repertoire requirements. While DVDs are preferred for recorded auditions, CDs are acceptable.

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## Performance (Performance), MM (FAPERF3MM)

Online Degree Search Title: Music Performance (MM)
Campus: TEMPE
Program Description: The M.M. with a concentration in performance stresses the pedagogical and performance practices of major Western art music. Students work on specific skills for their instrument while developing the knowledge and abilities to be leaders in the music community. Opportunities to collaborate with music scholars, theorists, composers, educators and other performers provides students with a broad and well-rounded foundation for advanced careers in music.

Degree Requirements: 32 credit hours and a Written Comprehensive Exam
This program requires eight hours of study in the concentration area, eight hours of studio instruction, and 16 hours in music history, music theory and electives.

Admission Requirements: The applicant must submit the Graduate College online application. The application for admission must be accompanied by:

- A resume.
- Three letters of recommendation from qualified persons in the field capable of addressing your background talent, and ability to complete the requested degree.
- A list of repertoire studied and/or performed after high school, including the title of the work, role (if applicable), and full name of the composer. The list should be divided into two sections: Works studied and works publicly performed.
- Voice applicants only: A prescreening audition video recording is required to be considered for an invitation for a live audition.

Voice applicants: The deadline for submission of complete application materials is Oct. 15 for spring admission and Dec. 1 for fall admission. After review of complete application materials, an applicant may be invited for a live audition.
Instrumental and keyboard applicants: The deadline for submission of complete application materials is Oct. 15 for spring admission and Dec. 15 for fall admission. A live audition will be scheduled after receipt of complete application materials. Recorded auditions are acceptable but must be in accordance with repertoire requirements. While DVDs are preferred for recorded auditions, CDs are acceptable.

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## Theatre, MA (FATHEAMA)

Online Degree Search Title: Theatre (MA)
Campus: TEMPE
Program Description: The M.A. in theatre introduces students to graduate study in the field of theatre and performance studies and provides a broad base of knowledge in the areas of history and historiography, theory, literature and dramaturgy, and practice.
Students will have the opportunity to tailor their program of study to specific research and artistic subject areas, and will prepare a research thesis or an applied project as the culmination of their studies. The program is designed for those who wish to later enter a Ph.D. program, for K-12 educators seeking to expand and amplify their expertise, and for those seeking to advance their knowledge of theatre and performance studies.

Degree Requirements: 30 credit hours a Thesis and a Written Comprehensive Exam
This program consists of:

- Twenty-four credit hours of graduate course work (15 credits of required courses and nine credits of electives).
- Six credit hours devoted to a thesis chosen by the student and approved by the student's faculty committee.

Admission Requirements: Applicants must submit a Graduate College online application.Students must fulfill both the requirements of the Graduate College and those of the School of Theatre and Film. The deadline for application to the School of Theatre and Film is Feb. 15.
Students should provide:

- A current curriculum vitae.
- A sample of scholarly writing.
- A statement of purpose that should address the student's background and experiences as they relate to their reasons for pursuing the master's degree, describe their research interests and indicate future career goals.
- Three letters of recommendation from professionals familiar with their work.


## Contact Information:

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## Theatre (Directing), MFA (FADIRMFA)

Online Degree Search Title: Theatre (Directing) - MFA
Campus: TEMPE

Program Description: Admission to the directing, performance and performance design concentrations is cohort-based.
The M.F.A. in theatre with a concentration in directing program seeks students who demonstrate serious purpose, professional aspirations, theatrical daring and the desire to explore new work both in collaborating with playwrights and in the devising/creation process. Respect for fellow artists and a desire to learn about how all of the parts fit together are essential qualities in the successful M.F.A. candidate and, indeed, the successful director. Students are introduced to varied critical viewpoints from select artists and scholars. A hands-on, mentor-student approach is emphasized with the intent of developing the skill, artistry and communication skills, required to be an excellent professional director.

Degree Requirements: 60 credit hours and an Applied Project
The M.F.A. in theatre with a concentration in directing is a three-year program culminating in an applied project. Practical directing and directing classes are approximately 50 percent of the course work. Classes also include:

- Acting: viewpoints and composition.
- Assistant directing for a professional or faculty director working on the main stage.
- Design collaboration.
- Directing the new play.
- Dramatic theory and criticism.
- Dramaturgy.
- Performance technology.
- Projects in community-based drama.
- Re-envisioning.
- Research methods.
- Solo performance.
- Theatre for social change.
- Theatre history and literature.
- Theatre organization and management.
M.F.A. directors will direct a new work every year. Major assignments may include:
- Directing a new play by an M.F.A. playwright.
- Creating and directing an adaptation of an existing work.
- Guiding an ensemble in the devising process and directing the resulting devised piece.
- Directing one applied project in the main-stage season.

Directing faculty mentor all projects. Academic and artistic progress is evaluated at the end of each semester by a faculty committee. Program continuation is contingent upon a successful review. A professional internship is required for each M.F.A. director.

Admission Requirements: Applicants must submit a Graduate College online application.
Students are admitted to this program every three years, forming a cohort with their colleagues in the other M.F.A. programs in theatre practice; the next class will begin course work in 2011. Students must fulfill both the requirements of the Graduate College and those of the School of Theatre and Film. The deadline for application to the School of Theatre and Film is March 1.
In addition to the requirements outlined on the Graduate College website, the School of Theatre and Film requires additional application components for the M.F.A. in directing, including:

- A personal interview.
- A statement of purpose.
- A current resume.
- A written directorial approach to a play selected by the reviewing committee.
- Three letters of reference from professionals familiar with the student's work.


## Contact Information:

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## Theatre (Dramatic Writing), MFA (FADRWRTMFA)

Online Degree Search Title: Theatre (Dramatic Writing) MFA
Campus: TEMPE
Program Description: The concentration in dramatic writing within the theatre M.F.A. will include course work in playwriting, historical studies in theatre, dramatic theory, directing new work, literary management, electives and related topics such as writing for solo performance, screenwriting, devising and collaborative writing.
The School of Theatre and Film's support for the production of new plays and performance works written by its M.F.A. students, is an aspirational model for other institutions. Student-written work is highlighted in the annual new works series.

Degree Requirements: 60 credit hours including the required course (THP 693) and an Applied Project
The M.F.A. in theatre with a concentration in dramatic writing is composed of the following:

- Required core courses (27).
- Required concentration courses (9).
- Elective courses (18).
- Applied project (6).

The student will write a thesis play as their applied project, which will be developed as one of the following:

- A full production on the school's main stage.
- A workshop production.
- A staged reading.

Admission Requirements: Applicants must meet all admission requirements of the Graduate College. In addition, applicants should have an undergraduate major in theatre or film, with a GPA of 3.00 or above ( 4.00 scale). If an applicant does not have an undergraduate major in theatre or film, the student may be admitted on the basis of excellent creative writing and academic work. Potential students must submit an online application to the Graduate College.
Applicants must also submit the following:

- Manuscript sample of 30 or more pages of dramatic writing (for stage, television or film).
- Current resume.
- Statement of career goals.
- Three letters of recommendation.


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## Theatre (Interdisciplinary Digital Media), MFA (FATHEADMFA)

Online Degree Search Title: Theatre - Interdisciplinary Digital Media (MFA)
Campus: TEMPE
Program Description: This graduate degree concentration is offered through the School of Theatre and Film in collaboration with the School of Arts, Media and Engineering (AME). It focuses on the growing importance of digital media as a way of both making art and thinking about art. AME courses and research activities prepare students to become sophisticated developers, makers, evaluators and entrepreneurs of digital media, while at the same time completing a sequence of core courses in theatre.

Degree Requirements: 60 credit hours an Applied Project a Written Comprehensive Exam and an Oral Comprehensive Exam The degree requirements are:

- A minimum of 18 hours in core AME courses, to be selected in consultation with each student's AME graduate advisor.
- Fifteen hours in research and applied project credits.
- Twenty-seven hours of core courses in theatre theory, history and practice.

The overall course of study is developed with the advisor to ensure a breadth of transdisciplinary knowledge.

Admission Requirements: Applicants must submit a Graduate College online application.Students must fulfill the requirements of the Graduate College and those of both the School of Theatre and Film and the School of Arts, Media and Engineering. The deadline for application to the School of Theatre and Film is Feb. 15, but please note that for financial aid purposes, the AME deadline is Feb. 1.

The School of Theatre and Film requires the following additional application materials for the M.F.A. in integrated digital media:

- A current resume.
- A portfolio of materials that support the statement of purpose (writing samples, electronic performance materials, etc.).
- A statement of purpose detailing the applicant's background in theatre, as well as the applicant's interest in and suitability for work in the inter-discipline of theatre and digital media.
- Three letters of recommendation from professionals familiar with the applicant's work.


## Contact Information:

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## Theatre (Performance), MFA (FAPERFMFA)

## Online Degree Search Title: Theatre Performance (MFA)

Campus: TEMPE
Program Description: The M.F.A. in theatre with a performance concentration readies students for the evolving roles of theatre and the performing artist. The school offers an approach to training that includes, and goes beyond, traditional actor training by fusing traditional techniques with newer approaches, such as:

- Connected Motion.
- Devising and integrating media with live performance.
- Fitzmaurice Voicework.
- Meisner Technique.
- Rasaboxes.
- Solo Performance.
- Viewpoints.

The program stresses skills for approaching and creating new work, developing artistic entrepreneurship, performance applications in multimedia, and interdisciplinary collaboration, informed by artistic integrity and social responsibility.
During the third year of study, candidates serve professional internships. ASU enjoys a close relationship with the Actors Theatre, an Equity company located in downtown Phoenix, which is dedicated to producing contemporary work. Other companies where students have served internships include:

- SITI Company.
- Cleveland Playhouse.
- Hartford Stage.
- Chicago Dramatist Theatre.
- Victory Gardens.
- North Coast Rep.
- One Yellow Rabbit.
- Theatre L'Homme Dieu.

Admission to the directing, performance and performance design concentrations is cohort-based.

Degree Requirements: 60 credit hours and an Applied Project
The M.F.A. in theatre with a concentration in performance is a three-year program culminating in an applied project.

- The first year is dedicated to intensive voice, movement and acting training, and individual skill and ensemble building. During this year, students discover their artistic vision.
- Second-year training provides opportunities for students to explore this newly discovered vision in a wide range of performance modalities such as Viewpoints, community-embedded drama, performance art, solo performance and devising. Performers collaborate with the M.F.A. cohort to develop new work.
- The third year serves as a bridge between the educational and professional worlds and the communities they serve.

Students conclude their graduate studies with an applied performance project, specifically suited to their needs and interests. Academic and artistic progress is evaluated at the end of each semester by a faculty committee. Program continuation is contingent upon a successful review. A professional internship is required.

Admission Requirements: Applicants must submit a Graduate College online application.
Students are admitted to this program every three years, forming a cohort with their colleagues in the other M.F.A. programs in theatre practice. The next class will begin course work in 2011. Students must fulfill both the requirements of the Graduate College and those of the School of Theatre and Film. The deadline for application to the School of Theatre and Film is March 15.
The School of Theatre and Film requires additional application components for the M.F.A. in theatre (performance):

- A current resume.
- A statement of purpose.
- An academic writing sample.
- An audition.
- An interview, either on campus or at one of the university/resident theatre association sites.
- Three letters of recommendation from professionals familiar with the student's work


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## Theatre (Performance Design), MFA (FAPERDMFA)

Online Degree Search Title: Theatre (Performance Design) - MFA
Campus: TEMPE
Program Description: Admission to the directing, performance and performance design concentrations is cohort-based. ASU offers a strenuous and innovative M.F.A. in theatre with a concentration in performance design program that focuses on a nontraditional approach to design training in preparation for the theatrical design challenges of the future. The design student works with an ensemble of designers, directors and performers to create new projects that redefine the role of the traditional designer. Skills for approaching and creating new work include:

- Design applications in multimedia.
- Development of artistic entrepreneurship and integrity.
- Drafting and computer imaging.
- New work development.

Performance design students work in multiple venues, including the 481-seat Galvin Playhouse, 164 -seat Lyceum Theatre, two studios and one experimental space. In addition, students work in the shops, a design studio and a computer-imaging lab.

Degree Requirements: 60 credit hours and an Applied Project
The M.F.A. in design is a three-year program culminating in an applied project.

- A professional internship is required and can be fulfilled any time after the first year of study.
- Students conclude with an applied ensemble design project suited to their needs and interests.
- The first year is dedicated to creating an ensemble, as well as honing the skills needed to visually communicate ideas to a director and audience.
- The second year concentrates on new work development that will culminate in a tour. This year also concentrates on strengthening design abilities.
- The third year serves as a bridge between the educational and professional theatre and the communities they serve.
- Academic and artistic progress is evaluated at the end of each semester by a faculty committee.

Program continuation is contingent upon a successful review.

Admission Requirements: Applicants must submit a Graduate College online application.Students are admitted to this program every three years, forming a cohort with their colleagues in the other M.F.A. programs in theatre practice; the next class will begin course work in 2011. Students must fulfill both the requirements of the Graduate College and those of the School of Theatre and Film. The deadline for application to the School of Theatre and Film is March 15.
The School of Theatre and Film requires additional application components for the M.F.A. in performance design:

- Academic writing sample.
- A current resume.
- A personal interview.
- A portfolio of 10 samples of visual work to be presented at interview.
- A written statement of purpose.
- Three letters of recommendation from professionals familiar with the student's work.


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## Theatre (Theatre For Youth), MFA (FAYOUTHMFA)

Online Degree Search Title: Theatre for Youth (MFA)
Campus: TEMPE

Program Description: This M.F.A. program offers comprehensive course work in all areas of theatre for youth, including renowned faculty, superb facilities, practical experience working in drama and theatre with and for young people, and a challenging and supportive atmosphere ideal for educating future leaders in the field.

Degree Requirements: 60 credit hours an Applied Project a Written Comprehensive Exam and an Oral Comprehensive Exam The M.F.A. in theatre (theatre for youth) is a three-year program. Required core courses are supplemented by elective courses in an emphasis area. The emphasis areas prepare students for careers in professional theatre, as artists or education directors, specialists in arts organizations, or as teachers in elementary or secondary education. An internship with a professional theatre company, school or arts organization, and a final applied project complete the program.

Admission Requirements: Applicants must submit a Graduate College online application.Students must fulfill both the requirements of the Graduate College and those of the School of Theatre and Film. The deadline for application to the School of Theatre and Film is Feb. 15.

The School of Theatre and Film requires the following additional application components for the M.F.A. in theatre (theatre for youth):

- A current resume.
- A statement of purpose, including a cover letter indicating the preferred area of study, summarizing the applicant's qualifications, artistic vision and how the applicant feels the M.F.A. theatre for youth program can help meet his or her goals.
- An interview.
- Three letters of recommendation from professionals familiar with the applicant's work.


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## Theatre (Theatre For Youth), PHD (FAYOUTHPHD)

Online Degree Search Title: Theatre for Youth (PhD)
Campus: TEMPE

Program Description: This Ph.D. degree program is designed to give students a broad knowledge of theatre, specialized research, production and teaching skills in theatre for youth. Studies include theatre history, theory and literature, theatre education and the theories and principles governing how young people learn to create and respond to theatre.
Each theatre for youth Ph.D. student follows a course of study including required and elective classes to demonstrate general literacy in theatre history, criticism and literature as well as in-depth understandings and research perspectives in theatre and drama with and for young people.
Students may take courses in directing, acting, design, playwriting, theatre history and theatre theory and criticism. Tutorial courses with major professors are encouraged, as is graduate study in other departments offering courses in research methods, educational theory, critical theory and arts education.

Degree Requirements: 90 credit hours a Foreign Language Exam a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
The concentration in theatre for youth requires:

- A core of 30 credit hours.
- Twenty-four credit hours in research and dissertation preparation.
- Six credit hours of research methodology, approved by the supervisory committee. Where appropriate, the supervisory committee may approve certification of literacy in a foreign language as meeting this research methodology requirement. This approval is granted only in those circumstances wherein fluency in that language is necessary for the dissertation research.

In meeting these requirements, students, with the advice of the supervisory committee, may select theatre courses in areas such as:

- Community-based theatre.
- Theatre education.
- Theatre for social change.
- Theatre history.
- Theatre theory/criticism.
- Tutorial courses.

Students may also take courses outside the School of Theatre and Film in areas such as:

- Area studies.
- Aesthetic theory.
- Children's literature.
- Critical and cultural studies.
- Educational theory and methodology.
- Languages and literatures.
- The arts and arts education.

All activities are selected to help students meet the goals of the program and develop the capability of becoming leaders in the field. Preliminary Reviews

Reviews of a student's performance in courses and development of research skills, artistic skills and teaching competencies are conducted by the supervisory committee at the end of each semester.
Comprehensive Examinations
These examinations are composed of written and oral components centering on theatre history, literature and criticism, theatre for youth and theatre education and the research area.

## Dissertation Requirements

A dissertation based on original research work of high quality, demonstrating proficiency in the student's special field, is required.
Admission Requirements: Applicants must submit a Graduate College online application.Students must fulfill both the requirements of the Graduate College and those of the School of Theatre and Film. The deadline for application to the School of Theatre and Film is Jan. 15. The School of Theatre and Film requires additional application components for the Ph.D. in theatre with a concentration in theatre for youth:

- A current curriculum vitae.
- A sample of scholarly writing.
- A statement of purpose, which should explain the applicant's research, artistic and educational philosophies and goals, as appropriate to the applicant's desired focus in the Ph.D. program; explain also how study in the ASU Theatre for Youth program might particularly suit these goals/philosophies.
- An interview is strongly recommended.
- Three letters of recommendation from professionals familiar with the applicant's work; these letters should address specifically the applicant's potential for success in a Ph.D. program.


## Contact Information:

Design and the Arts, Herberger Institute for
School of Theatre and Film
http://theatrefilm.asu.edu/
GHALL 232
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480-965-5337

## Theatre (Theatre/Performance Americas), PHD (FAPERAMPHD)

Online Degree Search Title: Theatre (Performance America) - PhD
Campus: TEMPE
Program Description: The Ph.D. in theatre, with a concentration in theatre and performance of the Americas, trains scholars to examine the histories, theories and practices associated with cultural performance, from a hemispheric point of view. Through course work, seminars, research and study opportunities, doctoral students work from diverse critical perspectives that mobilize thought across geographical and disciplinary borders. They, thereby, develop skills to re-examine and interrogate the canon of theatre as text and as performance, expanding the traditional boundaries of theatre studies in two ways:

- Via a perspective that considers the shared histories and practices of theatre and performance in the Americas as central to an intervention in traditionally narrated histories and theories of theatre.
- Via the methodologies of cultural and performance studies that accommodate other forms of embodied expression related to, but distinct from, formal theatrical expression.

The course of study is designed to provide substantive historical and theoretical grounding in the field, while allowing flexibility in the choice of specialized seminar and practical experiences. The first year of study immerses students in the theoretical and practical ground work of performance research in general, and modalities of performance in the Americas in particular. In the second year, students build on research interests identified in the first year through specialized course work and practical experience.

Degree Requirements: 90 credit hours a Foreign Language Exam a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
A total of 60 credit hours are required after completion of a master's degree in a relevant discipline.
The concentration in theatre and performance of the Americas consists of:

- A core of 24 hours.
- Twelve hours of electives, two of which must come from outside the school (as approved by the supervisory committee).
- Twenty-four hours of research and dissertation preparation.

In meeting these requirements, students, with the advice of the supervisory committee, may select theatre courses in areas such as:

- Community-based theatre.
- Dramaturgy.
- Theatre for social change.
- Theatre history.
- Theatre theory/criticism.
- Topics seminars.

Students may also take courses outside the School of Theatre and Film in areas such as critical and cultural studies, area studies, languages and literatures, and aesthetic theory. All activities are selected to help students meet the goals of the program and develop the capability of becoming leaders in the field.
Preliminary Reviews
Reviews of the student's performance in courses and development of research skills, artistic skills and teaching competencies are conducted by the supervisory committee at the end of each semester.
Comprehensive Examinations
Examinations are composed of written and oral components centering on theatre history, literature and criticism, theatre and performance of the Americas and the research area.
Dissertation Requirements
A dissertation based on original high-quality research work, demonstrating proficiency in the student's special field, is required.
Admission Requirements: Applicants must submit a Graduate College online application.Students must fulfill both the requirements of the Graduate College and those of the School of Theatre and Film. The deadline for application to the School of Theatre and Film is Jan. 15.
The School of Theatre and Film requires additional application components for the Ph.D. in theatre with a concentration in theatre and performance of the Americas:

- A current curriculum vitae.
- A sample of scholarly writing.
- A statement of purpose, which should address the student's background and experiences as they relate to the student's reasons for pursuing the Ph.D.; describe the student's research interests; and indicate future career goals.
- An interview is strongly recommended.
- Three letters of recommendation from professionals familiar with the student's work.

Please note that we only accept students who have already earned a master's degree in a relevant area.

## Contact Information:

Design and the Arts, Herberger Institute for
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http://theatrefilm.asu.edu
GHALL 232
theatre@asu.edu
480-965-5337

## Urban Design, MUD (ARMUDMUD)

Online Degree Search Title: Urban Design (MUD)
Campus: TEMPE

Program Description: The M.U.D. is a multidisciplinary program within the Herberger Institute for Design and the Arts. The curriculum draws from the disciplines of architecture, landscape architecture, law, civil engineering, planning, public programs, real estate development and the first School of Sustainability in the U.S. The program leverages its local conditions (e.g., rapidly urbanizing metropolis, arid climate, New American University) toward the development of responsible global initiatives and innovative design strategies for urban environments. The curriculum is built around the analysis and understanding of contemporary urban conditions specific to rapidly urbanizing and arid regions of the world. Students are encouraged to pursue a concurrent degree with the school's Master of Science in built environment.

Degree Requirements: 45 credit hours and a Thesis or 45 credit hours including a Capstone Course (MUD 622) or 45 credit hours including the required course (MUD 593) and an Applied Project

Master of Urban Design (MUD) Degree Requirements:
First Year
Fall

MUD 521 Advanced Urban Design Studio I (5)
MUD 598 Urban Issues (3)
ATE 598 Sustainability of the Built Environment (3)
Spring
MUD 522 Advanced Urban Design Studio II (5)
MUD 524 Urban Elements (3)
Approved professional elective (3)
Second Year
Fall
MUD 621 Advanced Urban Design Studio III (5)
MUD 623 Thesis Research (3)
Approved professional elective (3)
Urban design professional elective (3)
Total credit hours in program: 45

Admission Requirements: Applicants must submit a Graduate College online application.Applicants who hold a studio based fouryear undergraduate design degree will be considered for the two-year M.U.D. program. The M.U.D. is a post-professional program. Two-Year Program Admission Requirements
Applicants must:

- Hold an undergraduate or graduate degree from a college or university recognized by ASU in a studio based design discipline.
- Meet the minimum GPA requirements as established by the Graduate College.
- Provide an official copy of GRE scores (unofficial copies will not be accepted). The school does not have a minimum score for admissions, however, the average scores of admitted students are between 500-600 for each section.
- International students are required to submit an official TOEFL score, minimum score for admission to the program is 100 (Internet), 250 (computer-based), or 600 (paper-based).
- Additional application materials can be found online at http://sala.asu.edu/students/grad/prospective/applying/.


## Admission Documents

Please submit the following items directly to the Graduate College:

- Official transcripts from all post-secondary institutions.
- Online application and fee.
- Test scores (GRE and TOFEL-for international applicants).


## Contact Information:

Design and the Arts, Herberger Institute for
The Design School
http://design.asu.edu/
CDN 162
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480-965-1174

## Engineering, Ira A. Fulton Schools of <br> Aerospace Engineering, MS (ESAEROSPMS)

Online Degree Search Title: Aerospace Engineering (MS)
Campus: TEMPE
Program Description: The faculty in aerospace engineering offer a graduate program leading to the M.S. in aerospace engineering. A number of wide and diverse research areas may be pursued. All the graduate programs stress a sound foundation leading to a specialized area of study. In order to gain admission to the M.S program, qualified applicants must secure a faculty advisor prior to admission. Qualified applicants who have not secured a faculty advisor prior to admission decisions may be offered admission to the M.S.E. program, with the opportunity to move to the M.S. after a thesis chair has been obtained. Additional information can be found in the Graduate Guidelines on the school website.

Degree Requirements: 30 credit hours and a Thesis or 30 credit hours and a Written Comprehensive Exam (MIP) or 30 credit hours and an Applied Project or 30 credit hours and an Oral Comprehensive Exam

The student is encouraged to select a program committee chair (faculty advisor) as soon as possible but must select a program committee chair prior to completing 15 credit hours. The name of the student's program committee chair must be filed with the graduate programs office via the interactive plan of study (iPOS). A change of program committee chair requires the approval of the Graduate Program Chair.
The program committee chair, in consultation with the student, will establish a Master of Science Program Committee (MSPC). The MSPC shall be composed of a minimum of three members from the ASU faculty with at least two being from the mechanical engineering graduate faculty. Participation of individuals from institutions external to ASU is encouraged but these shall be nonvoting members.
As soon as possible, but prior to completing 15 credit hours, the student, in consultation with the program committee chair, must file a iPOS with the university. The MSPC and the graduate program chair must approve changes to the iPOS.
The iPOS must be in accordance with university and program requirements. For students currently enrolled in a master's degree program at another institution and wishing to transfer to ASU, note that a maximum of nine graduate credit hours may be counted toward a M.S. at ASU. A minimum cumulative GPA of 3.00 is required throughout the program. Candidates for the M.S. must complete a minimum of 30 credit hours of course and thesis work distributed as follows:

- At least 12 credit hours of graduate MAE course work ( 500 level and above). Non-MAE graduate courses may be substituted upon the approval of the MAE Graduate Affairs Committee.
- At least six credit hours of graduate mathematics-oriented courses ( 500 level and above). Students are strongly encouraged to take MAE 501 Linear Algebra in Engineering and MAE 502 Partial Differential Equations in Engineering.
- At least six credit hours of additional graduate courses; these may be either MAE or non-MAE courses, and are not restricted to science, mathematics, or engineering. A maximum of three credit hours of MAE 584 Internship may be counted towards this requirement. A combined maximum of six credit hours of MAE 591 Seminar, MAE 594 Graduate Research Conference, or MAE colloquium classes, such as MAE 580 Solar Energy Colloquium, may be counted towards this requirement.
- Six credit hours of MAE 599 thesis.

A final defense of the thesis will be administered by the Master of Science Program Committee.

## Admission Requirements:

- Students interested in applying to this program must submit an online application to the Graduate College. A minimum GPA of 3.00 (on a 4.00 scale) is required for graduates from accredited U.S. institutions. The Graduate College is responsible for international GPA interpretation.
- All applicants are required to take the general GRE.
- All applicants are required to submit a statement of academic and career objectives and address the desire to pursue graduate studies at ASU in aerospace engineering.
- Students who do not have English as their primary language are required to achieve a minimum score of 80 on the internetbased Test of English as a Foreign Language (TOEFL).
- Three letters of recommendation are required, using the online recommendation system.


## Contact Information:

Engineering, Ira A. Fulton Schools of
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http://engineering.asu.edu/emte
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semte@asu.edu
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## Aerospace Engineering, MSE (ESAERSPMSE)

Online Degree Search Title: Aerospace Engineering (MSE) Campus: TEMPE

Program Description: The aerospace engineering faculty offer a graduate program leading to the M.S.E. in aerospace engineering. A number of wide and diverse research areas may be pursued. All the graduate programs stress a sound foundation leading to a specialized area of study. Additional information can be found in the Graduate Guidelines on the school website.

Degree Requirements: 30 credit hours and a Written Comprehensive Exam (MIP) or 30 credit hours and an Applied Project or 30 credit hours and an Oral Comprehensive Exam

The M.S.E. is the professional master's degree. The student is encouraged to select a program committee chair (faculty advisor) as soon as possible but must select a program committee chair prior to completing 15 credit hours. The name of the student's program
committee chair must be filed with the graduate programs office via the interactive plan of study (iPOS). A change of program committee chair requires approval of the Graduate Program Chair.
The program committee chair, in consultation with the student, will establish a Master of Science in Engineering Program Committee. The committee shall be composed of a minimum of three members from the ASU faculty with at least two being from mechanical, aerospace, chemical and materials engineering faculty.
As soon as possible, but prior to completing 15 credit hours, the student, in consultation with the program committee chair, must file an iPOS with the university. The committee and the Graduate Program Chair must approve changes to the iPOS.
The iPOS must be in accordance with university and program requirements. For students currently enrolled in a master's degree program at another institution and wishing to transfer to ASU, note that a maximum of nine graduate credit hours may be counted toward an M.S.E. at ASU. A minimum cumulative GPA of 3.00 is required throughout the program. Candidates for the M.S.E. must complete a minimum of 30 credit hours of course work distributed as follows:

- At least 15 credit hours of course work directly related to a research area.
- At least six credit hours of mathematics.
- At least nine credit hours of graduate courses outside the major research area; these may be engineering, science, mathematics or other areas approved by the student.
- A maximum of three credit hours of MAE 593 Applied Project may be listed on the iPOS.


## Admission Requirements:

- Students interested in applying to this program must submit the Graduate College online application. A minimum GPA of 3.00 (on a 4.00 scale) is required for graduates from accredited U.S. institutions. The Graduate College is responsible for international GPA interpretation.
- All applicants are required to take the general GRE.
- Students who do not have English as their primary language are required to achieve a minimum score of 80 on the internetbased Test of English as a Foreign Language (TOEFL).
- Three letters of recommendation are required, using the online recommendation system.
- All applicants are required to submit a statement of academic and career objectives and address the desire to pursue graduate studies at ASU in aerospace engineering.


## Contact Information:

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## Aerospace Engineering, PHD (ESAERSPPHD)

Online Degree Search Title: Aerospace Engineering (PhD)
Campus: TEMPE

Program Description: The graduate programs aerospace engineering accommodate individual interests, and encourage independent and innovative study. Students are part of a diverse intellectual community dedicated to advancing the state of the art and practice of aerospace and mechanical engineering. All graduate programs stress a sound foundation in technical fundamentals, communication and professionalism. Additional information can be found in the Aerospace Engineering Graduate Guidelines on the school website.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

The Ph.D. is directed toward original research. Students are required to write and defend a dissertation describing an original contribution within the discipline. The student must select a program committee chair (faculty advisor) prior to completing 42 credit hours. A change of program committee chair requires approval of the Graduate Program Chair.
A graduate student pursuing a Ph.D. plan of study in aerospace engineering must complete within the first year of graduate studies at ASU: three 500-level (preferably core) courses in the major research area and one 500 -level mathematics course with an average GPA of 3.25 or above. Specific qualifying course requirements for each major research area are identified in the Aerospace Engineering Graduate Handbook.
The committee chair, in consultation with the student, will establish a program committee with the purposes to:

- Approve the plan of study (iPOS).
- Provide guidance for the student's research.
- Administer the comprehensive examinations.
- Administer the dissertation defense.

The program committee shall consist of at least five ASU faculty with the majority being from mechanical, aerospace, chemical and materials engineering, with at least one being from outside these academic disciplines. Additional information regarding the composition of the committee can be found in the Graduate Student Handbook.
The student, in consultation with the program committee chair and committee, must file an iPOS prior to completing 42 credit hours. The iPOS must meet general university requirements, including the need for rigorous fundamental knowledge of engineering principles. Ph.D. candidates must complete a minimum of 84 credit hours of course and dissertation work in total for degree requirements. Thirty credit hours of appropriate course work from a previously earned master's degree may be applied toward the total credit hours; at least 54 hours must be taken at ASU after admission to the Ph.D. program. A minimum cumulative GPA of 3.25 is required. Degree requirements are distributed as follows:

- At least 18 credit hours of course work directly related to the research area (major).
- At least nine credit hours of mathematics.
- At least nine credit hours of graduate courses outside the major research area; these must be in mathematics, engineering and/or science.
- Twelve credit hours of MAE 799 dissertation.
- MAE 792 research credit hours.

All students pursuing the Ph.D. are required to pass a comprehensive examination administered by the program committee.

## Admission Requirements:

- Students interested in applying to this program must submit the Graduate College online application. A minimum GPA of 3.00 (on a 4.00 scale) is required for graduates from accredited U.S. institutions. The Graduate College is responsible for international GPA interpretation.
- All applicants are required to take the general GRE.
- Students who do not have English as their primary language are required to achieve a minimum score of 80 on the internetbased Test of English as a Foreign Language (TOEFL).
- Three letters of recommendation are required, using the online recommendation system.
- All applicants are required to submit a statement of academic and career objectives and address the desire to pursue graduate studies at ASU in aerospace engineering.


## Contact Information:

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## Aerospace Engineering (Engineering Education), PHD (ESAEEEDPHD)

Online Degree Search Title: Aerospace Engineering (Engineering Education) PhD
Campus: TEMPE

Program Description: Students pursuing the Ph.D. in aerospace engineering are eligible to apply for the engineering education concentration. The engineering education concentration is interdisciplinary and will combine research in engineering with research in education. The doctoral engineering education concentration will prepare students to become scholars, researchers or practitioners in academia. The concentration provides students with an opportunity to explore pedagogy, methodology, curriculum and instruction and apply it to engineering.
Students enrolled in the engineering education concentration under the Ph.D. in aerospace engineering will complete 18 credit hours of graduate-level engineering course work with a specific research focus, nine hours of graduate-level mathematics, and 15 hours of graduate-level education course work. The program is directed toward original research. The students will be required to write and defend a dissertation that describes an original contribution within the chosen engineering discipline that integrates an education component (e.g., research on engineering pre-university programs, undergraduate engineering curriculum and instruction). The research results should be suitable for publication in a reputable journal. Students will be required to satisfy all aerospace engineering qualifying and comprehensive requirements and to abide by all policies set forth by the Ira A. Fulton Schools of Engineering.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

The program committee for this concentration shall consist of at least five ASU faculty with the majority being from the aerospace engineering graduate faculty, but at least one being a non-aerospace engineering graduate faculty. It is expected, but not required, that the program committee will be co-chaired by a member of the aerospace engineering graduate faculty, and a faculty member with expertise in education or an education-related discipline.
This concentration entails the following:

- Eighteen credit hours will be taken in the major engineering research area.
- Nine credit hours of appropriate mathematics courses.
- Twelve credit hours of dissertation.
- Fifteen credit hours of appropriate education courses in methodology, curriculum and instruction; research hours will be taken as required.
- Thirty credit hours of appropriate course work may be accepted from a previously earned engineering master's degree. Students without a previously earned master's degree will be required to take 30 credit hours of course work and research related to the student's dissertation.

Admission Requirements: All applicants are required to submit the Graduate College online application, meet all Graduate College admission criteria, and take the general GRE; a subject-specific GRE is not required. Other requirements are as follows:

- A minimum GPA of 3.00 (on a 4.00 scale) for graduates of accredited U.S. institutions. ASU's Graduate College is responsible for international GPA interpretation.
- Students whose native language is not English are required to achieve minimum English proficiency requirements as specified by the Graduate College.
- Three letters of recommendation, using the format specified by the unit.
- A statement of academic and career objectives and address the desire to pursue an engineering education concentration in Ph.D. in aerospace engineering (statement of purpose).


## Contact Information:

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## Applied Ethics and the Professions (Ethics and Emerging Technologies), MA (LAAEPEETMA)

Online Degree Search Title: Applied Ethics (Ethics and Emerging Technologies) MA
Campus: POLY, TEMPE

Program Description: The purpose of this program is to examine ethical challenges posed by emerging technologies, including nanotechnology, neurotechnology, biotechnology, robotics and advanced information and communication technology. Not only are these technologies being developed at an unprecedented pace, they also share several unique characteristics, including system complexity, social embeddedness and the potential to converge with one another. Emerging technologies will not only change how humans live and work, but have the potential to alter the very nature of human existence. Questions considered by courses in the program include:

- Ethical responsibilities of professionals engaged in development of emerging technologies.
- Emerging technologies and public policy.
- Promise and perils of emerging technologies.
- Whether traditional ethical concepts and processes can and should be applied to emerging technologies.

Degree Requirements: 30 credit hours including the required course (AEP 593) and an Applied Project
Graduate course work is distributed as follows:

- Required core courses (6).
- Required concentration course (3).
- Elective concentration courses (15).
- Required culminating experience as capstone courses (6).

Admission Requirements: All applicants must submit the Graduate College online application and meet both the Graduate College and program admission criteria. The following documents are required for the application process, and submit the following:

- Official GRE scores are to be sent directly to the Graduate College.
- Official transcripts from all postsecondary institutions attended are to be sent directly to the Graduate College.
- Statement of interest in applied ethics and career goals.
- Three letters of recommendation.
- Applicants whose native language is not English must demonstrate proficiency in the English language by meeting the Graduate College's English proficiency requirements. Applicants required to demonstrate English proficiency and seeking a teaching assistantship must demonstrate proficiency in spoken English; a score of 55 or better on the Speaking Proficiency English Assessment Kit (SPEAK) or a score of 26 on the speaking portion of the TOEFL is required.


## Contact Information:

Engineering, Ira A. Fulton Schools of
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ECG 251
sebe.advising@asu.edu
480-965-0595

## Biomedical Engineering, MS (ESBIOENMS)

Online Degree Search Title: Biomedical Engineering (MS)

## Campus: TEMPE

Program Description: The Harrington biomedical engineering faculty offer a graduate program leading to the M.S. in biomedical engineering.
Areas of study include:

- Biomaterials.
- Biomedical imaging and informatics.
- Molecular, cellular and tissue engineering.
- Neural engineering.
- Rehabilitation engineering.

Biomedical engineering offers both thesis and nonthesis M.S. degrees to those students who meet the criteria for successful graduate study.
Biomedical engineering offers a joint B.S.E. and nonthesis M.S. in the biomedical engineering degree program. The program allows up to nine credit hours of graduate-level course work taken as technical electives during the senior year to be applied toward both the undergraduate and graduate degrees.

Degree Requirements: 30 credit hours and a Thesis or 30 credit hours and a Written Exam (MIP) or 30 credit hours and an Applied Project
All candidates pursuing an M.S. in biomedical engineering are required to complete an approved plan of study. Special course requirements for the different areas of study are established by the faculty.
Candidates whose undergraduate degree is in a field other than biomedical engineering may be required to complete more than the required credit hours of the program of study.
The following are program requirements for the thesis M.S., for a total of 30 credits:

- Biomedical engineering course work (9).
- Biomedical engineering seminar (3).
- General electives (6).
- Mathematical electives (6).
- Thesis (6).

The following are program requirements for the nonthesis M.S., for a total of 30 credits:

- Applied project (3).
- Biomedical engineering course work (13).
- Biomedical engineering seminar (2).
- General electives (6).
- Mathematical electives (6).

Admission Requirements: In addition to the general requirements for admission to the Graduate College, applicants must submit the following directly to the Graduate College:

- An online Graduate College application.
- A statement of purpose.
- Official GRE scores.
- Official Test of English as a Foreign Language (TOEFL) scores, if applicable.
- Resume or curriculum vitae.
- Three letters of recommendation.


## Contact Information:

Engineering, Ira A. Fulton Schools of
Harrington Bioengineering Program
http://engineering.asu.edu/bhse
ECG 334
sbhse@asu.edu
480-965-3028

## Biomedical Engineering, PHD (ESBIOENPHD)

Online Degree Search Title: Biomedical Engineering (PhD)
Campus: TEMPE

Program Description: The Harrington biomedical engineering faculty offer a graduate program leading to the Ph.D. in biomedical engineering.
Areas of study include:

- Biomaterials.
- Biomedical imaging and informatics.
- Molecular, cellular and tissue engineering.
- Neural engineering.
- Rehabilitation engineering.

The Ph.D. in biomedical engineering is conferred upon evidence of excellence in research resulting in a scholarly dissertation that is a contribution to knowledge.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

Required Bioengineering Courses
Doctoral students are required to complete the following core curriculum of nine credits:
BME 598 Modeling and Simulation of Physiological Systems (4)
BME 598 Modeling for Molecular/Cellular Engineering (4)
BME 598 Scientific Communications (1)
All students must complete the two courses listed below in their chosen track, for a total of eight credits:
Neural Engineering Track
BME 598 Introduction to Neural Engineering (4)
BME 598 Computational Neuroscience (4)
Molecular Cellular and Tissue Engineering Track
BME 598 Advanced Bioengineering Transport (4)
BME 598 Advanced Biomaterials (4)
Bioimaging and Bioinformatics Track
BME598 Application of MRI Imaging (4)
BME598 Introduction to Biomedical Imaging (4)
Technical Electives
No fewer than 12 credit hours of course work (as determined by the student's committee)
Research/Dissertation
BME 780 Practicum (3)BME 792 Research (37)
BME 799 Dissertation (12)
Seminar
BME 591 (3)

Admission Requirements: In addition to the general requirements for admission to the Graduate College, applicants must submit the following directly to the Graduate College:

- An online Graduate College application.
- A statement of purpose.
- Official GRE scores.
- Official Test of English as a Foreign Language (TOEFL) scores, if applicable.
- Resume or curriculum vitae.
- Three letters of recommendation.

Please view the School of Biological and Health Systems admissions checklist on the web for specific admissions procedures and deadlines.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Harrington Bioengineering Program
http://engineering.asu.edu/bhse
ECG 334
sbhse@asu.edu
480-965-3028

## Chemical Engineering, MS (ESCHEMEMS)

Online Degree Search Title: Chemical Engineering (MS) Campus: TEMPE

Program Description: The chemical engineering faculty offer a graduate program leading to the M.S. in chemical engineering. Areas of research emphasis include:

- Atmospheric aerosols.
- Biomolecular engineering.
- Biosensors.
- Chemical therapies for neurodegenerative diseases.
- Electrochemistry.
- Electronic materials processing.
- Engineering education.
- Flexible display technology.
- Fuel cells.
- Inorganic membranes.
- Process design and operations.
- Protein synthesis.
- Transport phenomena in living systems.
- Water purification.

A graduate handbook detailing information on graduate studies in chemical engineering, is available on the school website. Students should contact the graduate programs office for additional details.

Degree Requirements: 33 credit hours a Written Comprehensive Exam and an Oral Comprehensive Exam (MIP) or 33 credit hours and a Thesis or 33 credit hours and an Applied Project

All candidates for the M.S. in chemical engineering are required to complete an approved plan of study. The required course work for this degree is divided into the following categories:
Chemical Engineering Core Requirements: Students are required to take 15 credit hours of graduate-level chemical engineering courses, exclusive of seminar (CHE 591), deficiency courses (CHE 501-505), research/thesis (CHE 592/599) and reading and conference (CHE 590).
Of these 15 hours, a minimum of three courses (nine hours) must come from the following list:
CHE 527 Advanced Applied Mathematical Analysis in Chemical Engineering (3)
CHE 533 Transport Processes I (3)
CHE 543 Thermodynamics of Chemical Systems (3)
CHE 544 Chemical Reactor Engineering (3)
CHE 598 Research Methods (3)

Technical Electives: Masters candidates must select a minimum of nine hours of graduate-level elective courses (beyond the required 15 hours of CHE core requirements) if they take only six hours of thesis. Six hours of technical electives are required if the student elects to take nine hours of combined thesis/research (which includes six hours of thesis and three hours of research). At least one technical elective course (three hours) must be taken from outside of chemical engineering.
Courses in programs outside of chemical engineering, at the 400-level, are considered appropriate technical electives unless the course content significantly matches that of 300 -level or lower courses in engineering. For instance, STP 420 does not qualify as a valid technical elective. Any questions on course validity for the technical elective requirement should be addressed to the student's committee chair and/or the Graduate Program Chair. A maximum of six credit hours of 400 -level courses may be used on a a graduate plan of study.
CHE 590 Reading and Conference may be taken as a technical elective only once, for a maximum of three credits.
Research/Thesis: Each student must register for a combined total of either six or nine credit hours of research (CHE 592) and/or thesis (CHE 599). This total must include six credit hours of thesis.
Seminar: All full-time chemical engineering graduate students are required to successfully complete the seminar course (CHE 591) during every semester of residence. Part-time students are required to complete CHE 591 at least three times. Only three hours of seminar apply toward the M.S., regardless of how many times it is taken.
Candidates whose undergraduate degree was in a field other than chemical engineering may be required to complete more than 33 credit hours.

Admission Requirements: Applicants to the M.S. program are required to submit the following:

- Application fee.
- Graduate College online admissions application.
- GRE scores.
- Official Test of English as a Foreign Language (TOEFL) scores, for international students only. Chemical engineering requires a minimum score of 600, paper-based, and 100, Internet-based for admissions consideration.
- Official transcriptions from all prior institutions attended.
- Resume.
- Statement of purpose describing your research interests and reasons for seeking a degree in Chemical Engineering.
- Three letters of recommendation from faculty or professionals who can comment on your research and scholarly capabilities. Letters of recommendation are submitted via the online recommendation system.


## Contact Information:

Engineering, Ira A. Fulton Schools of
Chemical Engineering Program
http://engineering.asu.edu/emte
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480-965-2335

## Chemical Engineering, MSE (ESCHEMEMSE)

Online Degree Search Title: Chemical Engineering (MSE)
Campus: TEMPE

Program Description: The chemical engineering faculty offer a professional program leading to the M.S.E. in chemical engineering. The program is designed to bridge the gap between knowledge of engineering sciences and creative engineering practice while at the same time increasing the depth and breadth of knowledge in selected areas of emphasis. The pattern of course work applicable to the degree is potentially unique for each student, although it must conform to the general guidelines for subject matter for the degree as authorized here.
Two options are available within the M.S.E. program. The first is a general M.S.E., where students follow the same course outline as required by the M.S., except that they will substitute thesis/research hours with additional elective course work. The second is a M.S.E. with a specialization in semiconductor processing and manufacturing. Both options require completion of an applied project, rather than a thesis, at the conclusion of program course work. Note that financial assistance is not available to students who elect an M.S.E. program.

Degree Requirements: 33 credit hours a Written Comprehensive Exam and an Oral Comprehensive Exam (MIP) or 33 credit hours and an Applied Project

Additional courses may be assigned by the supervisory committee depending on the background of the candidate. Specific requirements for the two M.S.E. program options are outlined below:

Option 1: General M.S.E. in chemical engineering (non-thesis).
Students who choose this option follow the requirements for the M.S. (see M.S. program requirements), but will replace the thesis/research credits with additional credit hours of course work. In addition, M.S.E. students must take three credit hours of seminar. This degree requires a total of 33 credit hours.
After completing the course work, students must complete a report, typically 15-20 double-spaced pages, plus figures, on a topic of their choice (the topic needs to be approved by their committee). At the conclusion of the report, the student will make an oral presentation on the topic to his/her committee.
Option 2: M.S.E. in chemical engineering with a specialization in semiconductor processing and manufacturing (non-thesis).
The M.S.E. in chemical engineering and a specialization in semiconductor processing and manufacturing, involves a total of 33 credit hours. After completing the course work, students must complete a report, typically 15-20 double-spaced pages, plus figures, on a topic of their choice (the topic needs to be approved by their committee). At the conclusion of the report, the student will make an oral presentation on the topic to his/her committee. The following courses are required for this degree:
CHE 458/598 Semiconductor Material Processing (3)
CHE 598 Deposition and Etching (3)
EEE 591 Fundamentals of Solid State Devices (3)
IEE 570 or IEE 572 Advanced Quality Control Design of Engineering Experiments (3)
MSE 598 Materials Issues in Semiconductor Processing (3)

- Six credits of Chemical Engineering electives at the 520 level or higher.
- Six credits of technical electives at the 500 level or higher.
- Three credits of a technical elective at the 400 level or higher.

Seminar: In addition to the 30 credits listed above, three credits of the one-unit graduate seminar (CHE 591) are required. Online students can substitute an additional technical elective (500-level or higher) for this requirement.

Admission Requirements: Applicants to the M.S.E. program are required to submit the following:

- Application fee.
- Graduate College online admission application.
- Current resume.
- Official Test of English as a Foreign Language (TOEFL) scores, for international students only. Chemical Engineering requires a minimum of 600 for paper-based and 100 for Internet-based for admissions consideration).
- Official transcripts from all prior institutions attended.
- Resume.
- Statement of purpose, describing your research interests and reasons for seeking a degree in chemical engineering.
- Three letters of recommendation from faculty or professionals who can comment on your research and scholarly capabilities. Letters of recommendation are submitted via the on-line recommendation system.

Please view the school website for specific admissions procedures.
Students applying for the M.S.E. in chemical engineering may have an B.S. in a field other than chemical engineering. The qualifications of transition students are reviewed by the chemical engineering graduate admissions committee, and a special program is designed for successful applicants. Deficiencies for admission to the M.S.E. are specified at the time of admission.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Chemical Engineering Program
http://engineering.asu.edu/emte
ECG 202
semte@asu.edu
480-965-2335

## Chemical Engineering, PHD (ESCHEMEPHD)

Online Degree Search Title: Chemical Engineering (PhD)
Campus: TEMPE
Program Description: The chemical engineering faculty offer a graduate program leading to the Ph.D. in chemical engineering. Areas of research emphasis include:

- Atmospheric aerosols.
- Biomolecular engineering.
- Biosensors.
- Chemical therapies for neurodegenerative diseases.
- Electrochemistry.
- Electronic materials processing.
- Engineering education.
- Flexible display technology.
- Fuel cells.
- Inorganic membranes.
- Process design and operations.
- Protein synthesis.
- Transport phenomena in living systems.
- Water purification.

A graduate handbook, detailing information on graduate studies in chemical engineering, is available on the school website. Students should contact the graduate programs office for additional details.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

Chemical Engineering Core: The Ph.D. program requires 15 credit hours of graduate-level chemical engineering courses. The following five courses (comprising these 15 credit hours) are required for all students:
CHE 527 Advanced Applied Mathematical Analysis in Chemical Engineering (3)
CHE 533 Transport Processes I (3)
CHE 543 Thermodynamics of Chemical Systems (3)
CHE 544 Chemical Reactor Methods (3)
CHE 598 Research Methods (3)
Technical Electives: In addition to the 15 credit hours of core above, the Ph.D. program requires 12 credit hours of technical electives from within or outside the chemical engineering program. CHE courses meeting this requirement must be at the 520 level or higher; 400 -level and 590 courses (from CHE or outside programs) may not be used to fulfill this requirement (although they may be used to satisfy additional research and electives courses). Students should consult with their supervisory committees in selecting appropriate technical elective courses.
Research/Dissertation: Students are required to take 12 hours of research (CHE 792) and 12 hours of dissertation (CHE 799), for a combined total of 24 hours. Note that 12 hours (and only 12) of dissertation credit (CHE 799) are required on the plan of study. Moreover, students can only take CHE 799 once they have passed the comprehensive exam and been admitted to candidacy. Seminar: Students must register for the one-credit-hour seminar (CHE 591) during every semester in residence. However, only a maximum of five credit hours may apply to the plan of study.
Additional Research/Elective Hours: The additional 28 hours necessary to meet the 84-hour minimum may be fulfilled with any combination of additional research hours (CHE 792) and technical electives from chemical engineering or other programs. CHE 590 Reading and Conference hours may also be used to fulfill this area.
Note that a maximum of six credit hours of 400 -level courses in programs outside chemical engineering may be used to fulfill this area unless the course content significantly matches that of 300 -level or lower courses in engineering. For example, STP 420 does not qualify as a valid elective. Elective courses used to meet this requirement must be approved as part of the student.

Admission Requirements: Applicants to the Ph.D. program are required to submit the following:

- Application fee.
- Current resume.
- Graduate College online admissions application.
- GRE scores.
- Official Test of English as a Foreign Language (TOEFL) scores, for international students only. Chemical engineering requires a minimum of 600 paper-based and 100 Internet-based for admissions consideration.
- Official transcripts from all prior institutions attended.
- Statement of purpose, describing your research interests and reasons for seeking a degree in chemical engineering.
- Three letters of recommendation from faculty or professionals who can comment on your research and scholarly capabilities. Letters of recommendation are submitted via the online recommendation system.

Please view the department page for specific admissions procedures on the school website. To be eligible for regular admission, the student must have a bachelor's degree in chemical engineering (or in a closely related field). To be eligible for regular admission, U.S. citizens normally will have a minimum GPA of 3.20 ( 4.00 scale), or equivalent. Foreign applicants normally will be in the top 10
percent of their graduating class. Students entering with master's degrees are required to have a minimum GPA in their master's degree course work of a 3.50 ( 4.00 scale).

## Contact Information:

Engineering, Ira A. Fulton Schools of
Chemical Engineering Program
http://engineering.asu.edu/emte
ECG 202
semte@asu.edu
480-965-2335

## Civil, Environmental and Sustainable Engineering, MS (ESCIVILMS)

Online Degree Search Title: Civil, Environmental, and Sustainable Engineering (MS)
Campus: TEMPE

Program Description: The faculty in civil, environmental and sustainable engineering offer a graduate program leading to a Master of Science (M.S.) in civil, environmental and sustainable engineering. The program is designed to enhance the knowledge gained in the undergraduate program by requiring the students to understand and practice fundamental concepts in engineering, mathematics and the basic sciences.
The pattern of course work applicable to the degree is potentially unique for each student, although it must conform to the general guidelines for subject matter content for the degree as authorized here, on the program's website and in the program's graduate handbook. Students are admitted to one of the following specialty areas:

- Environmental engineering.
- Geotechnical engineering.
- Hydrosystems engineering.
- Structural engineering.
- Transportation engineering.

Degree Requirements: 30 credit hours and a Thesis or 30 credit hours and a Thesis (MIP)

The written thesis must be original research in nature. All candidates for the M.S. are required to complete 24 credit hours of approved graduate course work and a minimum of six credit hours of thesis. Additional courses may be assigned by the graduate supervisory committee, depending on the background of the candidate.
A final oral examination in defense of the thesis written work is required for all students.

Admission Requirements: Applicants must submit an online Graduate College application.
Applicants are expected to satisfy all requirements for both admission to the Graduate College and to the program. Entry into this program requires a bachelor's degree with a major in engineering or in a closely related bachelor's degree program. The student's credentials for admission are evaluated by the graduate program chair and a committee chaired by the specialty area coordinator. The minimum GPA requirement is an overall undergraduate GPA of 3.00 , on a 4.00 scale. Applicants with a lower GPA may be provisionally admitted at the discretion of the admission committee.
A student whose undergraduate degree is not in civil engineering is required to take appropriate undergraduate courses as deficiency courses to establish a base of knowledge in the discipline. Deficiencies for admission to the graduate degree programs are specified at the time of admission and details can be obtained at the graduate studies section of the program's website.
Applicants must take the GRE and have their official scores sent directly to the Graduate College. Prospective students should note that the following two requirements need to be met for consideration for admission, 1) minimum score in the Quantitative section is 700, and 2) minimum combined Quantitative and Verbal score is 1100 . More information regarding how to send official GRE scores are on the Graduate College website.
Applicants are required to submit three letters of recommendation. Applicants are encouraged to sbumit a resume and personal statement.

Applicants whose native language is not English must demonstrate proficiency in the English language by meeting the Graduate College's English proficiency requirements. Applicants required to demonstrate English proficiency and seeking a teaching assistantship must demonstrate proficiency in spoken English; a score of 55 or better on the Speaking Proficiency English Assessment Kit (SPEAK) or a score of 26 on the speaking portion of the TOEFL is required.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Civil, Environmental and Sustainable Eng Program
http://engineering.asu.edu/sebe
ECG 251
sebe.advising@asu.edu
480-965-0595

## Civil, Environmental and Sustainable Engineering, MSE (ESCIVILMSE)

Online Degree Search Title: Civil, Environmental and Sustainable Engineering (MSE)
Campus: TEMPE
Program Description: The faculty in civil, environmental and sustainable engineering offer a professional program leading to an Master of Science in Engineering (M.S.E.) in civil, environmental and sustinable engineering. The program is designed to bridge the gap between knowledge of engineering sciences and creative engineering practice, while at the same time increasing the depth and breadth of knowledge in selected areas of emphasis.
The pattern of course work applicable to the degree is potentially unique for each student, although it must conform to the general guidelines for subject matter content for the degree as authorized here, on the program's website and in the program's graduate handbook. Students are admitted to one of the following specialty areas:

- Construction engineering.
- Environmental engineering.
- Geotechnical engineering.
- Hydrosystems engineering.
- Structural engineering.
- Transportation engineering.

Degree Requirements: 30 credit hours and a Written Comprehensive Exam or 30 credit hours and a Written Comprehensive Exam (MIP)

All candidates for the M.S.E. are required to complete approved graduate course work.
Additional courses may be assigned by the graduate supervisory committee depending on the background of the candidate. Details of the comprehensive written examinations for the different specialty areas can be obtained at the graduate studies section of the program's website.

Admission Requirements: Applicants must submit an online Graduate College application.
Applicants are expected to satisfy all requirements for admission to the Graduate College. Entry into this program normally requires a bachelor's degree with a major in engineering or in a closely related bachelor's degree program.
The student's credentials for admission are evaluated by the specialty area coordinator or by a committee chaired by the specialty area coordinator.
A minimum requirement is an overall undergraduate GPA of 3.00 , on a 4.00 scale. Applicants with a lower GPA may be provisionally admitted at the discretion of the admission committee.
A student whose undergraduate degree is not in civil engineering is required to take appropriate undergraduate courses as deficiency courses to establish a base of knowledge in the discipline. Deficiencies for admission to the graduate degree programs are specified at the time of admission and details can be obtained at the Graduate Studies section of the program's website.
Applicants must take the GRE and have their scores sent to the Graduate College. Prospective students should note that the following two requirements need to be met for consideration for admission, 1) minimum score in the Quantitative section is 700 , and 2) minimum combined Quantitative and Veral scores is 1100. More information regarding how to send official GRE scores to the Graduate College can be found at http://graduate.asu.edu/node/287.
Applicants whose native language is not English must demonstrate proficiency in the English language by meeting the Graduate College's English proficiency requirements.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Civil, Environmental and Sustainable Eng Program
http://engineering.asu.edu/sebe
ECG 251
sebe.advising@asu.edu
480-965-0595

## Campus: TEMPE

Program Description: The faculty in civil, environmental and sustainable engineering offer a graduate program leading to the Ph.D. in civil, environmental and sustainable engineering. A broad range of theoretical and experimental research programs have been established in civil and environmental engineering to prepare graduate students for careers in professional practice and research. These programs are constantly evolving with the changes in society and the profession, and many are multidisciplinary in nature. The pattern of course work applicable to the degree is potentially unique for each student, although it must conform to the general guidelines for subject matter content for the degree as authorized here and in the program's graduate handbook. Students are admitted to one of the following specialty areas:

- Environmental engineering.
- Geotechnical engineering.
- Hydrosystems engineering.
- Structural engineering.
- Transportation engineering.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
All candidates for the Ph.D. are required to complete 84 approved graduate credit hours (of these, 30 hours can be from the previously awarded master's degree). Additional graduate credit work may be assigned by the graduate supervisory committee, depending on the background of the candidate.
The graduate credit hours must include a minimum of 12 credit hours of research and 12 credit hours of dissertation work. This degree also requires written and oral comprehensive examinations and approval of the dissertation prospectus, for the student to be eligible for doctoral candidacy.
After entering candidacy, students complete their research, write and successfully defend their written dissertation.
A final oral examination in the defense of the dissertation work is required for all students.

Admission Requirements: Applicants must submit an online Graduate College application.
Applicants are expected to satisfy all requirements for admission to both the Graduate College and the program. Entry into this program requires a master's degree in engineering or in a closely related master's degree program. Exceptionally qualified students with a bachelor's degree may be admitted to the doctoral program.
The student's credentials for admission are evaluated by the graduate program chair and a committee chaired by the specialty area coordinator. A minimum requirement is an overall GPA of 3.20 in all post-baccalaureate graduate coursework.
A student whose undergraduate or master's degree is not in civil engineering is required to take appropriate undergraduate and/or graduate courses as deficiency courses to establish a base of knowledge in the discipline. Deficiencies for admission to the Ph.D. degree program are specified at the time of admission and details can be obtained at the graduate studies section of the program's website.
Applicants must take the GRE and have their official scores sent directly to the Graduate College. Prospective students should note that the following two requirements need to be met for admission, 1) minimum score in the Quantitative section is 700, and 2) minimum combined Quantitative and Veral score is 1100 . More information regarding how to send official GRE scores can be found on the Graduate College website.
Applicants are required to submit three letters of recommendation. Applicants are required to submit a resume and personal statement.
Applicants whose native language is not English must demonstrate proficiency in the English language by meeting the Graduate College's English proficiency requirements. Applicants required to demonstrate English proficiency and seeking a teaching assistantship must demonstrate proficiency in spoken English; a score of 55 or better on the Speaking Proficiency English Assessment Kit (SPEAK) or a score of 26 or higher on the speaking portion of the TOEFL is required.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Civil, Environmental and Sustainable Eng Program
http://engineering.asu.edu/sebe
sebe.advising@asu.edu
480-965-0595

## Computer Engineering (Computer Systems), MS (ESCENCMS)

Online Degree Search Title: Computer Engineering (Computer Systems) (MS)
Campus: TEMPE

Program Description: Computer engineering is a multi-disciplinary program that builds on the fundamentals of computer science, electrical engineering, industrial engineering and applied mathematics. Graduates of this program will have the knowledge and skills necessary to advance the design, system integration, testing, evaluation and deployment of the state-of-the-art hardware and software for systems that include computing, communications and networking (wired and wireless), control functions, sensing, signal processing and actuation. The M.S. program is intended for students that want to gain knowledge deeper than that provided at the B.S. level and sufficient for designing and implementing state-of the-art systems in industrial research and development positions. The program is also appropriate for students contemplating future Ph.D. study and desiring to gain experience in research. M.S. graduates may work under the direction of Ph.D. scientists and engineers in high tech lab settings assisting in developing innovative products and systems that require strong foundational knowledge in the underlying sciences and the ability to synthesize and analyze engineering principles as they relate to the development of new computer engineering technology.

Degree Requirements: 30 credit hours and a Thesis, or 30 credit hours, a Written Comprehensive Exam and an Oral Comprehensive Exam.

The computer engineering master's degree requires:
Thesis Option:
Six credit hours of required core courses (thesis option)
Eighteen credit hours of approved electives (thesis option)
Six credit hours of CEN 599 thesis (for thesis option)
Non-Thesis Option:
Six credit hours of required core courses (non-thesis option)
Twenty-four credit hours of approved elective (non-thesis option)
Admission Requirements: Minimum of a bachelor's degree (or equivalent) or a graduate degree from a regionally accredited college or university of recognized standing in a related field such as: computer engineering, computer systems engineering, electrical engineering or computer science.
Minimum of a 3.00 cumulative GPA (scale is $4.00=A$ ) in the last 60 hours of a student's bachelor's degree program.
GRE required if undergraduate program is not ABET accredited.
TOEFL required for applicants from a country whose native language is not
English.http://graduate.asu.edu/admissions/international/english_proficiency

## Contact Information:

Engineering, Ira A. Fulton Schools of
Computer Science and Engineering Program
http://engineering.asu.edu/cidse
GWC 206
cidse.advising@asu.edu
480-965-6410

## Computer Engineering (Computer Systems), PHD (ESCENCPHD)

Online Degree Search Title: Computer Engineering (Computer Systems) (PHD)
Campus: TEMPE
Program Description: Computer engineering is a multi-disciplinary program that builds on the fundamentals of computer science, electrical engineering, industrial engineering and applied mathematics. Graduates of this program will have the knowledge and skills necessary to fundamentally advance and develop new paradigms for the design, system integration, testing, evaluation and deployment of state-of-the-art hardware and software for systems that include computing, communications and networking (wired and wireless), control functions, sensing, signal processing and actuation. The Ph.D. program is intended for students with excellent ability in mathematics and physical science that are interested in gaining an in-depth knowledge of the foundational principles of engineering and pursuing a career in academia, research or highly technical entrepreneurial innovation. The Ph.D. program provides a broader and more in-depth preparation than the M.S. and M.S.E. programs in anticipation of a demonstrated ability to independently pursue more creative and substantive innovation with higher impact.

Degree Requirements: Program requires the following: 84 credit hours, a Written Comprehensive Exam, an Oral Examination, a Prospectus and a Dissertation.

The computer engineering Ph.D. degree requires:

Six credit hours of required core courses
At least 24 credit hours of approved computer engineering courses
At least 18 credit hours of approved graduate courses from science, engineering or mathematics
Twelve credit hours of CEN 799 Dissertation
At least 12 credit hours of CEN 792 Research
At most, six credit hours of CEN 790 Reading and Conference
Admission Requirements: Minimum of a bachelor's degree (or equivalent) or a graduate degree from a regionally accredited college or university of recognized standing in a related field such as: computer engineering, computer systems engineering, electrical engineering or computer science.
Minimum of a 3.00 cumulative GPA (scale is $4.00=A$ ) in the last 60 hours of a student's bachelor's degree program. A minimum GPA of 3.0 is required in the M.S./M.S.E. work for acceptance into the Ph.D. program.
GRE required if undergraduate program is not ABET accredited.
TOEFL required for applicants from a country whose native language is not
English.http://graduate.asu.edu/admissions/international/english proficiency

## Contact Information:

Engineering, Ira A. Fulton Schools of
Computer Science and Engineering Program
http://engineering.asu.edu/cidse
GWC 206
cidse.advising@asu.edu
480-965-6410

## Computer Engineering (Electrical Engineering), MS (ESCENEMS)

Online Degree Search Title: Computer Engineering (Electrical Engineering) (MS) Campus: TEMPE

Program Description: Computer engineering is a multi-disciplinary program that builds on the fundamentals of computer science, electrical engineering, industrial engineering and applied mathematics. Graduates of this program will have the knowledge and skills necessary to advance the design, system integration, testing, evaluation and deployment of the state-of-the-art hardware and software for systems that include computing, communications and networking (wired and wireless), control functions, sensing, signal processing and actuation. The M.S. program is intended for students that want to gain knowledge deeper than that provided at the B.S. level and sufficient for designing and implementing state-of the-art systems in industrial research and development positions. The program is also appropriate for students contemplating future Ph.D. study and desiring to gain experience in research. M.S. graduates may work under the direction of Ph.D. scientists and engineers in high tech lab settings assisting in developing innovative products and systems that require strong foundational knowledge in the underlying sciences and the ability to synthesize and analyze engineering principles as they relate to the development of new computer engineering technology.

Degree Requirements: 30 credit hours and a Thesis, or 30 credit hours, a Written Comprehensive Exam and an Oral Comprehensive Exam.

The computer engineering master's degree requires:
Thesis Option:
Six credit hours of required core courses (thesis option)
Eighteen credit hours of approved electives (thesis option)
Six credit hours of CEN 599 thesis (for thesis option)
Non-Thesis Option:
Six credit hours of required core courses (non-thesis option)
Twenty-four credit hours of approved elective (non-thesis option)

Admission Requirements: Minimum of a bachelor's degree (or equivalent) or a graduate degree from a regionally accredited college or university of recognized standing in a related field such as: computer engineering, computer systems engineering, electrical engineering or computer science.
Minimum of a 3.00 cumulative GPA (scale is $4.00=\mathrm{A}$ ) in the last 60 hours of a student's bachelor's degree program.
GRE required if undergraduate program is not ABET accredited.
TOEFL required for applicants from a country whose native language is not
English.http://graduate.asu.edu/admissions/international/english_proficiency

## Contact Information:

Engineering, Ira A. Fulton Schools of
Department of Electrical Engineering
http://engineering.asu.edu/cidse
GWC 206
cidse.advising@asu.edu
480-965-6410

## Computer Engineering (Electrical Engineering), PHD (ESCENEPHD)

## Online Degree Search Title: Computer Engineering (Electrical Engineering) (PHD)

Campus: TEMPE

Program Description: Computer engineering is a multi-disciplinary program that builds on the fundamentals of computer science, electrical engineering, industrial engineering and applied mathematics. Graduates of this program will have the knowledge and skills necessary to fundamentally advance and develop new paradigms for the design, system integration, testing, evaluation and deployment of state-of-the-art hardware and software for systems that include computing, communications and networking (wired and wireless), control functions, sensing, signal processing and actuation. The Ph.D. program is intended for students with excellent ability in mathematics and physical science that are interested in gaining an in-depth knowledge of the foundational principles of engineering and pursuing a career in academia, research or highly technical entrepreneurial innovation. The Ph.D. program provides a broader and more in-depth preparation than the M.S. and M.S.E. programs in anticipation of a demonstrated ability to independently pursue more creative and substantive innovation with higher impact.

Degree Requirements: Program requires the following: 84 credit hours, a Written Examination, an Oral Examination, a Prospectus and a Dissertation.

The computer engineering Ph.D. degree requires:
Six credit hours of required core courses
At least 24 credit hours of approved computer engineering courses
At least 18 credit hours of approved graduate courses from science, engineering or mathematics
Twelve credit hours of CEN 799 Dissertation
At least 12 credit hours of CEN 792 Research
At most, 6 credit hours of CEN 790 Reading and Conference
Admission Requirements: Minimum of a bachelor's degree (or equivalent) or a graduate degree from a regionally accredited college or university of recognized standing in a related field such as: computer engineering, computer systems engineering, electrical engineering or computer science.
Minimum of a 3.00 cumulative GPA (scale is $4.00=A$ ) in the last 60 hours of a student's bachelor's degree program. A minimum GPA of 3.0 is required in the M.S./M.S.E. work for acceptance into the Ph.D. program.
GRE required if undergraduate program is not ABET accredited.
TOEFL required for applicants from a country whose native language is not
English.http://graduate.asu.edu/admissions/international/english proficiency

## Contact Information:

Engineering, Ira A. Fulton Schools of
Department of Electrical Engineering
http://engineering.asu.edu/cidse
GWC 206
cidse.advising@asu.edu
480-965-6410

## Computer Science, MCS (ESCOMSCMCS)

Online Degree Search Title: Computer Science (MCS)
Campus: TEMPE

Program Description: The Master of Computer Science (M.C.S.) is an advanced degree targeted at students with an undergraduate education in computing and related disciplines who can best profit from further breadth and background in computer science. The M.C.S. also affords an opportunity for students employed in industry to seek a breadth of advanced education in computer science.

The M.C.S. program reflects the dual nature of computer science as both a scientific and engineering discipline by allowing emphasis on theory as well as practical applications. Students seeking the M.C.S. submit a project portfolio compiling projects completed in three courses during their studies. Students can study topics such as:

- Artificial intelligence.
- Computer-aided geometric design.
- Computer architecture.
- Computer graphics.
- Computer science theory.
- Database concepts.
- Digital systems design.
- Distributed systems.
- Language processing.
- Networking.
- Operating systems.
- Software engineering.

Degree Requirements: 30 credit hours and a Portfolio
Each student defines a potentially unique program of study subject to approval by the graduate programs office and the Graduate College. The student must complete a minimum of 30 credit hours of approved graduate-level work. At least 24 of the 30 credit hours must be computer science and engineering (CSE) 500-level credits at ASU. At least 30 hours must be for formal course work (including CSE 591 but excluding credits for CSE 590 Reading and Conference).
M.C.S. students must complete a project portfolio from three courses in which the student received a "B" (3.00) grade or higher. See the Graduate Student Handbook for complete details: http://engineering.asu.edu/graduate/cs.
Students will also complete one course in three areas to cover a wide range of knowledge. The three areas are:

- Applications: courses are in the areas of artificial intelligence, databases, graphics and multimedia.
- Foundations: courses focus on algorithms, mathematical logic, programming languages and theory.
- Systems: courses cover topics in architecture, networks, operating systems and software engineering.

Admission Requirements: Students interested in applying to the M.C.S. program must submit an online application to the Graduate College.
An applicant for the M.C.S. program should have a bachelor's degree in computer science, computer engineering or a closely related area. Every applicant must submit:

- International students must submit Test of English as a Foreign Language (TOEFL) scores.
- Official transcripts from every university attended.
- Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
- A statement of purpose.
- Three letters of recommendation.
- Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.

If the student is assigned any deficiency course work upon admission, those classes must be completed with a grade of " B " (3.00) or higher within two semesters of admission to the program. Deficiency courses include:

CSE 230 Computer Organization and Assembly Language Programming
CSE 310 Data Structures and Algorithms
CSE 340 Principles of Programming Languages
CSE 355 Introduction to Theoretical Computer Science
CSE 360 Introduction to Software Engineering
CSE 430 Operating Systems
The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission. The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.

## Contact Information:

Engineering, Ira A. Fulton Schools of Computer Science and Engineering Program
http://engineering.asu.edu/cidse
BYENG 208
cidse.advising@asu.edu
480-965-3199

## Computer Science, MS (ESCOMSCMS)

Online Degree Search Title: Computer Science (MS)
Campus: TEMPE
Program Description: The Master of Science (M.S.) in computer science is a research-oriented degree targeted toward students with an undergraduate education in the science of computation. It provides instruction in advanced course work and emphasizes research by the student.
Students can conduct cutting-edge research in a wide variety of research areas including:

- Algorithms.
- Artificial intelligence.
- Bioinformatics.
- Computer-aided geometric design.
- Computer graphics.
- Computer networks.
- Database systems.
- Distributed computing and operating systems.
- Embedded systems.
- Information assurance. Intelligent information integration.
- Multimedia information systems.
- Software engineering.

Degree Requirements: 30 credit hours and a Thesis
Students complete 30 credit hours of course work, including six credit hours of thesis to graduate with the M.S. degree. Students must successfully pass a thesis defense to graduate.
Students will complete one course in three areas to cover a wide range of knowledge. The three areas are:

- Applications: courses are in the areas of artificial intelligence, databases. graphics and multimedia.
- Foundations: courses focus on algorithms, mathematical logic, programming languages and theory.
- Systems: courses cover topics in architecture, networks, operating systems and software engineering.

The remainder of the student's coursework focuses on the research area of interest, conducted with the guidance of a faculty advisor. Students must complete nine credit hours of course work in their research area.

Admission Requirements: Students interested in applying to the M.S. program must submit an online application to the Graduate College.
An applicant for the M.S. program should have a bachelor's degree in computer science, computer engineering or a closely related area. Every applicant must submit:

- Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
- Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.
- Three letters of recommendation.
- A statement of purpose.
- Official transcripts from every university attended.
- International students must submit Test of English as a Foreign Language (TOEFL) scores.

If the student is assigned any deficiency course work upon admission, those classes must be completed with a grade of " B " (3.00) or higher within two semesters of admission to the program. Deficiency courses include:
CSE 230 Computer Organization and Assembly Language Programming
CSE 310 Data Structures and Algorithms
CSE 340 Principles of Programming Languages
CSE 355 Introduction to Theoretical Computer Science
CSE 360 Introduction to Software Engineering
CSE 430 Operating Systems

The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission. The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.

## Contact Information:

Engineering, Ira A. Fulton Schools of Computer Science and Engineering Program
http://engineering.asu.edu/cidse
BYENG 208
cidse.advising@asu.edu
480-965-3199

## Computer Science, PHD (ESCOMSCPHD)

Online Degree Search Title: Computer Science (PhD)
Campus: TEMPE
Program Description: The Ph.D. in computer science program prepares students to undertake fundamental and applied research in computer science to prepare students for careers in academia, government and industry. Students can conduct cutting-edge research in a wide variety of research areas, including:

- Algorithms.
- Artificial intelligence.
- Bioinformatics.
- Computer-aided geometric design and computer graphics.
- Computer networks.
- Database systems.
- Distributed computing and operating systems.
- Embedded systems.
- Information assurance.
- Intelligent information integration.
- Multimedia information systems.
- Software engineering.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The Ph.D. includes 12-18 credit hours of CSE 792 Research and 12 credit hours of CSE 799 Dissertation. Students will complete one course in three areas to cover a wide range of knowledge. The three areas are:

- Applications: courses are in the areas of artificial intelligence, databases, graphics and multimedia.
- Foundations: courses focus on algorithms, mathematical logic, programming languages and theory.
- Systems: courses cover topics in architecture, networks, operating systems and software engineering.

Area courses cannot include CSE 598 courses.
Admission Requirements: Students interested in applying to this program must submit an online application to the Graduate College. An applicant for the Ph.D. program should have the equivalent of a bachelor's degree in computer science, computer engineering or a closely related area. Most applicants should have earned the master's degree, but exceptional undergraduate applicants may be admitted directly to the Ph.D. program.
Every applicant must submit:

- International students must submit Test of English as a Foreign Language (TOEFL) scores.
- Official transcripts from every university attended.
- Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
- A statement of purpose.
- Three letters of recommendation.
- Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.

If the student is assigned any deficiency course work upon admission, those classes must be completed with a grade of " B " (3.00) or higher within two semesters of admission to the program. Deficiency courses include:

CSE 310 Data Structures and Algorithms
CSE 340 Principles of Programming Languages
CSE 355 Introduction to Theoretical Computer Science
CSE 360 Introduction to Software Engineering
CSE 430 Operating Systems

The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission.
The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Computer Science and Engineering Program
http://engineering.asu.edu/cidse
BYENG 208
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480-965-3199

## Computer Science (Arts, Media and Engineering), MS (ESAMECSMS)

Online Degree Search Title: Computer Science - Art, Media and Eng (MS)
Campus: TEMPE
Program Description: The Master of Science (M.S.) in computer science program with a concentration in Arts, Media and Engineering (AME) emphasizes research on the integration of the human physical experience with computation and digital media. Arts, media and engineering researchers produce experiential media systems and models that:

- Assist the disadvantaged.
- Evolve human ability.
- Enhance scientific discovery.
- Empower creativity.
- Facilitate learning.
- Improve quality of life.

Within these application areas, researchers explore experiential construction, interaction and feedback, knowledge creation, sensing, perception and modeling.
The purpose of the arts, media and engineering concentration in computer science is to train hybrid engineering-arts graduates who get their inspiration from the arts and their methodology from computer science and engineering. Students will specialize in transdisciplinary media development. More information about AME can be found at: http://ame.asu.edu/.

Degree Requirements: 30 credit hours and a Thesis
Students complete 30 credit hours of course work, including nine credit hours of AME-approved coursework and six credit hours of thesis, to graduate with the degree. Students must successfully pass a thesis defense to graduate. Students will complete nine credit hours of AME courses selected in consultation with the student's AME graduate advisor.
Students will also complete one course in three areas to cover a wide range of knowledge. The three areas are:

- Applications: courses are in the areas of artificial intelligence, databases, graphics and multimedia.
- Foundations: courses focus on algorithms, mathematical logic, programming languages and theory.
- Systems: courses cover topics in architecture, networks, operating systems and software engineering.

Admission Requirements: Students interested in applying to this program must submit an online application to the Graduate College. An applicant for the M.S. program should have a bachelor's degree in computer science, computer engineering or a closely related area.
Every applicant must submit:

- International students must submit Test of English as a Foreign Language (TOEFL) scores.
- Official transcripts from every university attended.
- Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
- A statement of purpose.
- Three letters of recommendation.
- Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.

The statement of purpose must address the transdisciplinary nature of the arts, media and engineering program. Applicants should explain in a concise and persuasive manner how their educational, professional and personal experiences inform their research and creative interests, writing on any aspect of their background that supports candidacy to the program. For further information on how this statement can be expanded upon by students interested in a research assistantships or an Integrative Graduate Education and Research Traineeship (IGERT) within arts, media and engineering, please visit
http://ame.asu.edu/education/prospective/funding.php. Please submit a curriculum vitae with your statement of purpose.
If the student is assigned any deficiency course work upon admission, those classes must be completed with a grade of "B" (3.00) or higher within two semesters of admission to the program. Deficiency courses include:

CSE 230 Computer Organization and Assembly Language Programming
CSE 310 Data Structures and Algorithms
CSE 340 Principles of Programming Languages
CSE 355 Introduction to Theoretical Computer Science
CSE 360 Introduction to Software Engineering
CSE 430 Operating Systems
The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission.
The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Computer Science and Engineering Program
http://engineering.asu.edu/cidse
BYENG 208
cidse.advising@asu.edu
480-965-3199

## Computer Science (Arts, Media and Engineering), PHD (ESAMECSPHD)

Online Degree Search Title: Computer Science - Art, Media and Eng (PhD)
Campus: TEMPE
Program Description: The Ph.D. in computer science program with a concentration in arts, media and engineering emphasizes research on the integration of the human physical experience with computation and digital media. Arts, media and engineering researchers produce experiential media systems and models that:

- Assist the disadvantaged.
- Empower creativity.
- Enhance scientific discovery.
- Evolve human ability.
- Facilitate learning.
- Improve quality of life.

Within these application areas, researchers explore experiential construction, interaction and feedback, knowledge creation, sensing, perception and modeling.
The purpose of the arts, media and engineering concentration is to train hybrid engineering-arts graduates who get their inspiration from the arts and their methodology from computer science and engineering. Students will specialize in transdisciplinary media development. More information about arts, media and engineering can be found at http://ame.asu.edu/.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

Students in the Ph.D. in computer science program with an Arts, Media and Engineering concentration must complete a minimum of 84 credit hours of approved graduate-level work, of which 36 credit hours focus on arts, media, and engineering, chosen in consultation with the student's AME graduate advisor. Students must complete 12-18 credit hours of CSE 792 Research and 12 credit hours of CSE 799 Dissertation.
Students will also complete one course in three areas to cover a wide range of knowledge. The three areas are:

- Applications: courses are in the areas of artificial intelligence, databases, graphics and multimedia.
- Foundations: courses focus on algorithms, mathematical logic, programming languages and theory.
- Systems: courses cover topics in architecture, networks, operating systems and software engineering.

Admission Requirements: Students interested in applying to this program must submit an online application to the Graduate College. An applicant for the M.S. program should have a bachelor's degree in computer science, computer engineering or a closely related area. Most applicants should have earned a master's degree, but exceptional undergraduate applicants may be admitted directly into the Ph.D. program.
Every applicant must submit:

- International students must submit Test of English as a Foreign Language (TOEFL) scores.
- Official transcripts from every university attended.
- Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
- A statement of purpose.
- Three letters of recommendation.
- Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.

The statement of purpose must fulfill any requirements defined by the graduate programs office and also address the transdisciplinary nature of the arts, media and engineering program. Applicants should explain in a concise and persuasive manner how their educational, professional and personal experiences inform their research and creative interests, writing on any aspect of their background that supports candidacy to the program. For further information on how this statement can be expanded upon by students interested in a research assistantships or an Integrative Graduate Education and Research Traineeship (IGERT) within arts, media and engineering, please visit http://ame.asu.edu/education/prospective/funding.php. Please submit a current curriculum vitae with your statement of purpose.
If the student is assigned any deficiency course work upon admission, those classes must be completed with a grade of "B" (3.00) or higher within two semesters of admission to the program. Deficiency courses include:

CSE 230 Computer Organization and Assembly Language Programming
CSE 310 Data Structures and Algorithms
CSE 340 Principles of Programming Languages
CSE 355 Introduction to Theoretical Computer Science
CSE 360 Introduction to Software Engineering
CSE 430 Operating Systems
The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission.
The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Computer Science and Engineering Program
http://engineering.asu.edu/cidse
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cidse.advising@asu.edu
480-965-3199

## Computer Science (Information Assurance), MS (ESCSEIAMS)

Online Degree Search Title: Computer Science - Information Assurance (MS) Campus: TEMPE

Program Description: The Master of Science (M.S.) in computer science program with a concentration in information assurance is designed for graduate students who want to pursue a thorough education in the area of information assurance. The goal of this concentration is to provide students the knowledge, skills and the advanced development capability in science and engineering for information assurance, including computer and network security, software security, data and information security, applied cryptography and computer forensics. Students will have a competitive advantage to secure employment.
According to the National Security Agency, information assurance is defined as the set of measures intended to protect and defend information and information systems by ensuring their availability, integrity, authentication, confidentiality and nonrepudiation. This includes providing restoration of information systems by incorporating protection, detection and reaction capabilities.

Degree Requirements: 30 credit hours and a Thesis

Students complete 30 credit hours of course work, including 15 credit hours of course work in information assurance and 6 credit hours of thesis work to graduate with the degree. Students must successfully pass a thesis defense to graduate.
Students must complete 15 hours of approved information assurance coursework. See
http://engineering.asu.edu/graduate/cs/concentrations\#ia for more information.
Students will also complete one course in three areas to cover a wide range of knowledge. The three areas are:

- Applications: courses are in the areas of artificial intelligence, databases, graphics and multimedia.
- Foundations: courses focus on algorithms, mathematical logic, programming languages and theory.
- Systems: courses cover topics in architecture, networks, operating systems and software engineering.

Admission Requirements: Students interested in applying to the M.S. program must submit an online application to the Graduate College. An applicant for the M.S. program should have a bachelor's degree in computer science, computer engineering or a closely related area.
Every applicant must submit:

- International students must submit Test of English as a Foreign Language (TOEFL) scores.
- Official transcripts from every university attended.
- Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
- A statement of purpose.
- Three letters of recommendation.
- Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.

If the student is assigned any deficiency course work upon admission, those classes must be completed with a grade of "B" or higher within two semesters of admission to the program. Deficiency courses include:

CSE 230 Computer Organization and Assembly Language Programming
CSE 310 Data Structures and Algorithms
CSE 340 Principles of Programming Languages
CSE 355 Introduction to Theoretical Computer Science
CSE 360 Introduction to Software Engineering
CSE 430 Operating Systems
The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission.
The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Computer Science and Engineering Program
http://engineering.asu.edu/cidse
BYENG 208
cidse.advising@asu.edu
480-965-3199

## Computer Science (Information Assurance), PHD (ESCSEIAPHD)

## Online Degree Search Title: Computer Science - Information Assurance (PHD) Campus: TEMPE

Program Description: The Ph.D. in computer science program with a concentration in information assurance is designed for graduate students who want to pursue a thorough education in the area of information assurance. The goal of this concentration is to provide students the knowledge, skills and the advanced development capability in science and engineering for information assurance, including:

- Applied cryptography.
- Computer forensics.
- Computer and network security.
- Data and information security.
- Software security.

Students will have a competitive advantage to secure employment. According to the National Security Agency, information assurance is defined as the set of measures intended to protect and defend information and information systems by ensuring their availability, integrity, authentication, confidentiality and nonrepudiation. This includes providing restoration of information systems by incorporating protection, detection and reaction capabilities.

Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation

The Ph.D. program must contain a minimum of 84 credit hours of approved graduate-level work which includes 18 credit hours of information assurance courses. Students must also complete 12-18 credit hours of CSE 792 Research and 12 credit hours of CSE 799 Dissertation. See http://engineering.asu.edu/graduate/cs/concentrations\#ia for more information on Information Assurance course options.
Students will also complete one course in three areas to cover a wide range of knowledge. The three areas are foundations, systems and applications. Foundations courses focus on algorithms, mathematical logic, programming languages and theory. Systems courses cover topics in architecture, networks, operating systems and software engineering. Applications courses are in the areas of artificial intelligence, databases, graphics and multimedia. Area courses cannot include CSE 598 courses.

Admission Requirements: Students interested in applying to this program must submit an online application to the Graduate College. An applicant for the Ph.D. program should have the equivalent of a bachelor's degree in computer science, computer engineering or a closely related area. Most applicants should have earned the master's degree, but exceptional undergraduate applicants may be admitted directly into the Ph.D. program.
Every applicant must submit:

- International students must submit Test of English as a Foreign Language (TOEFL) scores.
- Official transcripts from every university attended.
- Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
- A statement of purpose.
- Three letters of recommendation.
- Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.

If the student is assigned any deficiency course work upon admission, those classes must be completed with a grade of " $B$ " or higher within two semesters of admission to the program. Deficiency courses include:
CSE 230 Computer Organization and Assembly Language Programming
CSE 310 Data Structures and Algorithms
CSE 340 Principles of Programming Languages
CSE 355 Introduction to Theoretical Computer Science
CSE 360 Introduction to Software Engineering
CSE 430 Operating Systems
The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission.
The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Computer Science and Engineering Program
http://engineering.asu.edu/cidse
BYENG 208
cidse.advising@asu.edu
480-965-3199

## Computer Science (Information Assurance), MCS (ESCSEIMCS)

Online Degree Search Title: Computer Science - Information Assurance (MCS)
Campus: TEMPE
Program Description: The Master of Computer Science (M.C.S.) with a concentration in information assurance is designed for graduate students who want to pursue a thorough education in the area of information assurance. The goal of this concentration is to provide students the knowledge, skills and the advanced development capability in science and engineering for information
assurance, including computer and network security, software security, data and information security, applied cryptography and computer forensics.
The M.C.S. with a concentration in information assurance is an advanced degree targeted at students with an undergraduate education in computing and related disciplines, and students employed in industry who can best profit from further breadth and background in computer science and information assurance. Students will have a competitive advantage to secure employment. According to the National Security Agency, information assurance is defined as the set of measures intended to protect and defend information and information systems by ensuring their availability, integrity, authentication, confidentiality and nonrepudiation. This includes providing restoration of information systems by incorporating protection, detection and reaction capabilities.

Degree Requirements: 30 credit hours and a Portfolio

The student must complete 30 credit hours of approved graduate-level work, including 15 credit hours of information assurance course work. At least 24 of the 30 credit hours must be computer science and engineering (CSE) 500-level credits at ASU. At least 30 hours must be formal course work (including CSE 591 but excluding credits for CSE 590 Reading and Conference).
Students must complete 15 hours of approved information assurance course work. See
http://engineering.asu.edu/graduate/cs/concentrations\#ia for more information.
Students will also complete one course in three areas to cover a wide range of knowledge. The three areas are foundations, systems and applications. Foundations courses focus on algorithms, mathematical logic, programming languages and theory. Systems courses cover topics in architecture, networks, operating systems and software engineering. Applications courses are in the areas of artificial intelligence, databases, graphics and multimedia.
M.C.S. students must complete a project portfolio from three courses in which the student received a "B" (3.00) grade or higher. See the Graduate Student Handbook for complete details: http://engineering.asu.edu/graduate/cs.

Admission Requirements: Students interested in applying to the M.C.S. program must submit an online application to the Graduate College. An applicant for the M.C.S. program should have a bachelor's degree in computer science, computer engineering or a closely related area.
Every applicant must submit:

- International students must submit Test of English as a Foreign Language (TOEFL) scores.
- Official transcripts from every university attended.
- Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
- A statement of purpose.
- Three letters of recommendation.
- Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.

If the student is assigned any deficiency course work upon admission, those classes must be completed with a grade of " $B$ " or higher within two semesters of admission to the program. Deficiency courses include:

CSE 230 Computer Organization and Assembly Language Programming
CSE 310 Data Structures and Algorithms
CSE 340 Principles of Programming Languages
CSE 355 Introduction to Theoretical Computer Science
CSE 360 Introduction to Software Engineering
CSE 430 Operating Systems
The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission.
The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.

## Contact Information:

Engineering, Ira A. Fulton Schools of Computer Science and Engineering Program
http://engineering.asu.edu/cidse
BYENG 208
cidse.advising@asu.edu
480-965-3199

Online Degree Search Title: Computer Science (Biomedical Informatics)(MS) Campus: TEMPE

Program Description: The Master of Science (M.S.) program in computer science with a concentration in biomedical informatics is designed for graduate students who wish to specialize in such topics as genomics and computational systems biology. The concentration is interdisciplinary in nature, providing preparation that integrates technological expertise in the information sciences, computer science, bioscience and statistics with an understanding of the clinical environment of the health care professional. It will expose computer science students to current issues in clinical practice as well as the use of information systems in health care settings.

Degree Requirements: 30 credit hours and a Thesis
Students complete 30 credit hours of course work, including nine credit hours of course work in biomedical informatics and six credit hours of thesis work to graduate with the degree. Students must successfully pass a thesis defense to graduate. Students will complete the following nine credit hours in biomedical informatics:
BMI 501 Introduction to Biomedical Informatics (3)
BMI 540 Problem Solving in Biomedical Informatics (3)
BMI 5XX Approved Elective in Biomedical Informatics (3)
Students will also complete one course in three areas to cover a wide range of knowledge. The three areas are foundations, systems and applications. Foundations courses focus on algorithms, mathematical logic, programming languages and theory. Systems courses cover topics in:

- Architecture.
- Networks.
- Operating systems.
- Software engineering.

Applications courses are in the areas of artificial intelligence, databases, graphics and multimedia.
The remainder of the student's course work will be in computer science and students will focus their research in one of the following areas in:

- Bioinformatics.
- Biomedical informatics.
- Clinical informatics.
- Imaging informatics.
- Public health informatics.

Admission Requirements: Students interested in applying to this program must submit an online application to the Graduate College. An applicant to the M.S. program should have a bachelor's degree in computer science, computer engineering or a closely related area. Every applicant must submit:

- International students must submit Test of English as a Foreign Language (TOEFL) scores.
- Official transcripts from every university attended.
- Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
- A statement of purpose.
- Three letters of recommendation.
- Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.

If the student is assigned any deficiency course work upon admission, those classes must be completed with a grade of " B " (3.00) or higher within two semesters of admission to the program. Deficiency courses include:

CSE 230 Computer Organization and Assembly Language Programming
CSE 310 Data Structures and Algorithms
CSE 340 Principles of Programming Languages
CSE 355 Introduction to Theoretical Computer Science
CSE 360 Introduction to Software Engineering
CSE 430 Operating Systems
The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission.

The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Computer Science and Engineering Program
http://engineering.asu.edu/cidse
BYENG 208
cidse.advising@asu.edu
480-965-3199

## Construction Engineering, MSE (ESCONEMSE)

## Online Degree Search Title: Construction Engineering - MSE <br> Campus: TEMPE

Program Description: The Master of Science in Engineering (M.S.E.) in construction engineering is a multi-disciplinary program encompassing the areas of geotechnical engineering, structural engineering, transportation engineering, construction engineering and management-related topics. The degree focuses on a combination of design and management topics preparing the student for a career working at the interface of design and construction; it is especially desirable to those students who are interested in a career emphasizing construction of infrastructure.

Degree Requirements: 30 credit hours and a Written Comprehensive Exam

## Admission Requirements:

- Minimum of a bachelor's (or equivalent) or a graduate degree from a regionally accredited college or university of recognized standing in a related field such as civil engineering or construction engineering.
- Minimum cumulative GPA of 3.00 or higher, and GPA of 3.00 or higher in the last 60 hours of the student's bachelor's program.
- Students with an engineering degree other than civil engineering or construction may be considered for admission with deficiencies and/or provisions.
- GRE required.


## Contact Information:

Engineering, Ira A. Fulton Schools of
School of Sustainable Engineering \& Built Envirnmt
http://engineering.asu.edu/graduate

## ECG 251

sebe.advising@asu.edu
480-965-0595

## Construction Management, PHD (ESCONPHD)

Online Degree Search Title: Construction Management (PHD)

## Campus: TEMPE

Program Description: The faculty in the Del E. Webb School of Construction offer a graduate program leading to the Doctor of Philosophy (Ph.D.) degree in construction management. The purpose of the construction management Ph.D. program is to prepare research scholars, new faculty and professionals for positions in industry, universities and government, as well as facilitate a higher level of investigation and knowledge creation through the professor-Ph.D. student dynamic.
The Del E. Webb School of Construction is distinctively positioned to provide students with an interdisciplinary educational and research experience at the Ph.D. level, which will provide value in construction education, research and industry programs, private construction research facilities, and high-level management positions in the construction industry.
The objectives of the degree program include research experience for doctoral students who might wish to pursue careers in either industry or academia as members of interdisciplinary research teams, as well as providing a high-level interdisciplinary doctoral education for those who wish to develop academic careers teaching at the university level.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
The Ph.D. in construction will typically require three to four years of full-time study and research beyond the master's degree. Generally, students will be admitted into the Ph.D. degree program at or near the completion of their master's degree. The program requires 84 credit hours post-bachelor's degree or 54 credit hours post-master's degree.

The program consists of:

- Admission to candidacy.
- Core construction courses.
- Elective courses.
- A qualifying examination.
- Successful defense of a dissertation prospectus and complete dissertation.
- A written and oral comprehensive examination.

Admission Requirements: Students who hold a master's degree in a related field from a regionally accredited university or equivalent are eligible to apply for admission to the program. The program does not accept applicaitons from students without a master's degree. Related fields include construction, civil engineering, architecture and business. At the discretion of the admission committee, students from other disciplines may be eligible as well.
Applicants must submit a Graduate College online application.
Applicants are expected to satisfy all requirements for admission to both the Graduate College and the program. In addition, applicants are expected to be competent in construction topics. Admission is based upon:

- Applicants must take the GRE and have their official scores sent directly to the Graduate College. More information regarding how to send official GRE scores can be found on the Graduate College website.
- Applicants whose native language is not English must demonstrate proficiency in the English language by meeting the Graduate College's English proficiency requirements. Applicants required to demonstrate English proficiency and seeking a teaching assistantship must demonstrate proficiency in spoken English; a score of 55 or better on the Speaking Proficiency English Assessment Kit (SPEAK) or a score of 26 on the speaking portion of the TOEFL is required.
- A current resume.
- An evaluation of the student's academic and professional background.
- Masters' thesis abstract.
- A personal statement from each applicant describing their career goals and research objectives
- Research interests.
- Three letters of recommendation.


## Contact Information:

Engineering, Ira A. Fulton Schools of
Del E. Webb Construction
http://engineering.asu.edu/sebe
ECG 251
sebe.advising@asu.edu
480-965-0595

## Construction Management, MS (ESCONSTMS)

Online Degree Search Title: Construction Management (MS)
Campus: ONLNE, TEMPE
Program Description: The faculty in the Del E. Webb School of Construction offer a graduate program leading to the Master of Science (M.S.) in construction management. The interdisciplinary nature of the program allows a candidate's program of study to reflect both individual interests and career goals.
The primary objective of the program is to allow students with a bachelor's degree in construction or a related field such as architecture, business, or engineering to broaden and improve their professional capabilities in construction. The program is designed to meet the growing need for professionals with advanced technical, management and applied research skills in the construction industry.
The facilities management specialty area supports the needs of the student desiring a career in the maintenance, operation, renovation or decommissioning of existing facilities. The construction management specialty area allows students seeking upperlevel management positions in various sectors of the construction industry to improve their competency in project, program and company management areas.

Degree Requirements: 30 credit hours and a Thesis or 30 credit hours and a Written Comprehensive Exam

If appropriate graduate-level courses are not available in a student's pursued area of interest, the supervisory committee has the option to approve a maximum of six credit hours of 400-level course work to be part of the approved plan of study. Students may not use 400-level deficiency courses to satisfy degree requirements.

Admission Requirements: Applicants must submit a Graduate College online application.
Applicants are expected to satisfy all requirements for admission to both the Graduate College and the program. In addition, applicants are expected to be competent in basic construction topics. Admission is based on:

- Applicants whose native language is not English must demonstrate proficiency in the English language by meeting the Graduate College's English proficiency requirements. Applicants required to demonstrate English proficiency and seeking a teaching assistantship must demonstrate proficiency in spoken English; a score of 55 or better on the Speaking Proficiency English Assessment Kit (SPEAK) or a score of 26 on the speaking portion of the TOEFL is required.
- A current resume.
- An evaluation of the student's academic and professional background.
- Scores from the verbal, quantitative, and analytical writing portions of the GRE. Applicants must have their official GRE scores sent directly the to the Graduate College. More information regarding how to send official GRE scores can be found on the Graduate College website.
- A personal statement.
- Three Letters of recommendation.


## Contact Information:

Engineering, Ira A. Fulton Schools of
Del E. Webb Construction
http://engineering.asu.edu/sebe
ECG 251
sebe.advising@asu.edu
480-965-0595

## Electrical Engineering, MS (ESEEMS)

Online Degree Search Title: Electrical Engineering (MS)
Campus: TEMPE
Program Description: This program does not accept applications to the M.S. directly. Students should apply to the M.S.E. program, and once admitted, consult with the M.S.E. program advisors if interested in the M.S. program.
The electrical engineering faculty in the Ira A. Fulton Schools of Engineering offer a research program leading to the M.S. in electrical engineering.
Graduate courses and programs are offered in the following six areas of specialization:

- Control systems.
- Electromagnetics, antennas and microwave circuits.
- Electronic and mixed-signal circuit design.
- Electric power and energy systems.
- Signal processing and communications systems.
- Solid-state electronics.

Degree Requirements: 30 credit hours a Written Comprehensive Exam and an Oral Comprehensive Exam (MIP) or 30 credit hours and a Thesis

The credits earned towards this research degree must include a minimum of eight courses ( 24 hours minimum) and six hours of EEE 599 (thesis). As part of the eight courses, at least two should be outside the area of specialization. Requirements include:

- A final oral examination in defense of the thesis completes the M.S. requirements.
- At least four EEE courses.
- At least three EEE 500-level courses.
- At least two courses outside the area of specialization.
- At most two 400-level courses.
- At most one EEE 590 Reading and Conference or FSE course.

Courses are available on campus and online. The degree can be completed by taking classes entirely on campus or entirely online.

Admission Requirements: Applicants must submit a Graduate College online application.Students desiring the M.S. in electrical engineering must initially apply to the M.S.E. program. Students who later obtain a research advisor may transfer to the M.S. program.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Department of Electrical Engineering
http://engineering.asu.edu/ecee
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480-965-3424

## Electrical Engineering, MSE (ESEEMSE)

Online Degree Search Title: Electrical Engineering (MSE)
Campus: ONLNE, TEMPE
Program Description: The electrical engineering faculty in the Ira A. Fulton Schools of Engineering offer a professional program leading to the M.S.E. in electrical engineering. Graduate courses and programs are offered in the following six areas of specialization:

- Control systems.
- Electromagnetics, antennas and microwave circuits.
- Electronic and mixed-signal circuit design.
- Electric power and energy systems.
- Signal processing and communications systems.
- Solid-state electronics.

Courses are available on campus and online. The degree can be completed taking all classes on-campus or all classes online. A dual degree, the MBA/M.S.E. in electrical engineering is available as an online option. For more information, visit http://wpcarey.asu.edu/mba/online/academics/mba-mse-ee.cfm.

Degree Requirements: 30 credit hours and a Written Comprehensive Exam

The M.S.E. is a professional degree requiring a minimum 30 hours of course work (a minimum of 10 classes) and a final comprehensive examination. There is no thesis.
Requirements include:

- At least five EEE courses.
- At least three EEE 500-level courses.
- At least two courses outside the area of specialization.
- At most one EEE 590 Reading and Conference or FSE course.
- At most two 400-level courses.

A final comprehensive examination in the area of specialization completes the M.S.E. requirements. The examination is given each semester at the end of the sixth week of classes.

Admission Requirements: The decision to admit a student who has earned a bachelor's degree from a program accredited by ABET to a master's program in electrical engineering is based on a number of factors. A minimum requirement is an undergraduate GPA of 3.00 (out of 4.00 ) in the student's last two years of undergraduate work. A student whose undergraduate degree is not from an ABET-accredited program must have the equivalent of at least a 3.50 GPA in the last two years of undergraduate study and score at least 720 on the quantitative portion of the GRE and a good score on the writing portion.
Students interested in applying to this program must submit an online application to the Graduate College. In addition, an applicant whose native language is not English must demonstrate proficiency in the English language by meeting the English proficiency requirements stated on the Graduate College's website. International students seeking teaching assistantships must demonstrate proficiency in spoken English by scoring at least 26 on the speaking portion of the iBT or 50 on the ASU administered Speaking Proficiency English Assessment Kit (SPEAK).
The admissions deadline for the fall semester is the preceding Dec. 31; for the spring semester, the preceding July 31. A student whose undergraduate degree is not in electrical engineering may need to take appropriate undergraduate courses to establish a baseline of knowledge in the discipline.

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## Electrical Engineering, PHD (ESEEPHD)

Online Degree Search Title: Electrical Engineering (PhD)
Campus: TEMPE
Program Description: The Ph.D. in electrical engineering is awarded upon evidence of excellence in research leading to a scholarly dissertation that is a contribution to knowledge. Graduate courses and programs are offered in the following six areas of specialization:

- Control systems.
- Electromagnetics, antennas and microwave circuits.
- Electronic and mixed-signal circuit design.
- Electric power and energy systems.
- Signal processing and communications systems.
- Solid-state electronics.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

Ph.D. students are required to complete 84 credit hours of academic credit beyond the bachelor's degree. The following summarizes the degree course requirements:

- Master's degree: 30 hours, from any accredited institution.
- 500-level or above: 18 hours, at least nine hours of EEE courses.
- Research class or omnibus course hours: 12 hours, can be 400-level and above.
- Research: 12 hours (EEE 792).
- Dissertation: 12 hours (EEE 799).

The 84 hours include 30 credit hours for the master's degree, a required 18 credit hours of Ph.D. class work, 12 hours of research (EEE 792), and 12 hours (and only 12 hours) of dissertation (EEE 799).
The additional 12 hours (item \#3 above) can be more hours of research (EEE 792) or can be class work as determined by the supervisory committee. At least half (nine hours) of the minimum requirement of 18 credit hours of Ph.D. course work must be in electrical engineering. EEE 790 Reading and Conference can be used for no more than three credit hours toward the required 18, but does not count towards the nine hours of 500 -level EEE classes required.
All courses counting toward the required 18 hour minimum must be at the 500 -level or higher. Note that all courses having the prefix EEE 591 count as 400 -level courses. No more than one three-hour reading and conference (EEE 790) course can be taken as part of the 18 hour requirement. The content of any proposed Reading and Conference course must be reviewed and approved by the electrical engineering director of graduate studies before registering for the course.
A qualifying examination, a comprehensive exam, and the dissertation defense are required. Additional information on the program and can be found in the Blue Student Guide published and available on the program's webpage.

Admission Requirements: In general, a student must have a least a 3.00 GPA (out of 4.00 ) in all undergraduate course work and at least a 3.50 GPA in all graduate course work for admission to the Ph.D. program. A student must usually hold a master's degree before being admitted to the Ph.D. program. Direct Ph.D. admission is available for students graduating from an ABET-accredited electrical engineering program with a GPA of 3.60 or higher. A student whose master's degree is not from a U.S. institution must provide a score of at least 720 on the quantitative portion of the GRE. A good score on the writing portion is considered desirable. Students interested in applying to this program must submit an online application to the Graduate College. In addition, an applicant whose native language is not English must demonstrate proficiency in the English language by meeting the English proficiency requirements stated on the Graduate College's website. International students seeking teaching assistantships must demonstrate proficiency in spoken English by scoring at least 26 on the speaking portion of the iBT or 50 on the ASU administered Speaking Proficiency English Assessment Kit (SPEAK).
The admissions deadline for the fall semester is the preceding Dec. 31; for the spring semester, the preceding July 31. A student whose undergraduate degree is not in electrical engineering may need to take appropriate undergraduate courses to establish a baseline of knowledge in the discipline.

## Contact Information:

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## Electrical Engineering (Arts, Media and Engineering), MS (ESAMEMS)

Online Degree Search Title: Electrical Engineering - Art, Media and Eng (MS)
Campus: TEMPE

Program Description: A concentration in arts, media and engineering has been established as a collaboration between the electrical engineering program at ASU and the Herberger Institute for Design and the Arts. This concentration is available both for the M.S. and the Ph.D. students admitted to this program, who take two-thirds of their course, research and thesis credits from the electrical engineering and one-third of the credits from the arts, media and engineering program.
The arts, media and engineering (AME) program represents an ambitious interdisciplinary research community at ASU that is focused on the parallel development of media hardware, software, content and theory. AME research addresses the discontinuity that exists between media content and media technologies through a paradigm shift in media and arts training. The objective is to produce a new kind of hybrid graduate student who draws creativity from the arts and methodology from engineering sciences. AME trains students to integrate principles of digital signal processing and multimedia computing with artistic ideas and objectives, with the goal of enabling new paradigms of human-machine experience that directly address societal needs and facilitate knowledge. For more information, see http://ame.asu.edu.

Degree Requirements: 30 credit hours and a Thesis

Eight courses are required, typically five from EEE and three from AME. In addition, six hours of thesis are required, typically four credits from EEE and two from AME.

Admission Requirements: Students interested in applying to this program must submit the Graduate College online application. Students from ABET-accredited undergraduate programs who wish to be considered for a master's program must have a minimum GPA of 3.00 (on a four-point scale) in the last two years of undergraduate course work. Students from undergraduate programs that are not accredited by ABET must have a minimum GPA of 3.50 (on a four-point scale) in the last two years of undergraduate course work or have graduated first class with distinction and must score in the 90th percentile or higher on the quantitative section of the GRE general test.
In addition, an applicant whose native language is not English must demonstrate proficiency in the English language by meeting the English proficiency requirements stated on the Graduate College's Website. International students seeking teaching assistantships must demonstrate proficiency in spoken English by scoring at least 26 on the speaking portion of the iBT or 50 on the ASU administered Speaking Proficiency English Assessment Kit (SPEAK).
Applicants should submit materials that reflect the hybrid nature of the arts/engineering degree, including a statement of purpose and curriculum vitae demonstrating interest and relevant experience in the area. Students will have the opportunity to upload their curriculum vitae and statement of purpose when completing the online application. Additionally, AME requires three letters of recommendation from individuals familiar with the applicant's ability to succeed in an interdisciplinary research environment.

## Contact Information:

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## Electrical Engineering (Arts, Media and Engineering), PHD (ESAMEPHD)

Online Degree Search Title: Electrical Engineering - Art, Media and Eng (PhD)
Campus: TEMPE

Program Description: A concentration in arts, media and engineering has been established as a collaboration between the electrical engineering program at ASU and the Herberger Institute for Design and the Arts. This concentration is available both for the M.S.
and the Ph.D. students admitted to this program, who take two-thirds of their course, research and thesis credits from electrical engineering and one-third of the credits from the arts, media and engineering program.
The arts, media and engineering (AME) program represents an ambitious interdisciplinary research community at ASU that is focused on the parallel development of media hardware, software, content and theory. AME research addresses the discontinuity that exists between media content and media technologies through a paradigm shift in media and arts training. The objective is to produce a new kind of hybrid graduate student who draws creativity from the arts and methodology from engineering sciences. AME trains students to integrate principles of digital signal processing and multimedia computing with artistic ideas and objectives, with the goal of enabling new paradigms of human-machine experience that directly address societal needs and facilitate knowledge. For more information, see http://ame.asu.edu.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
Program details are as follows:

- A comprehensive examination.
- The dissertation defense.
- A qualifying examination.
- Ten courses are required, typically seven from EEE and three from AME.
- Twelve hours of dissertation are required, typically eight credits from EEE and four from AME.
- Twelve hours of research are required, typically eight credits from EEE and four from AME.

Admission Requirements: Applicants with a master's degree who wish to be considered for the Ph.D. program must have a minimum GPA of 3.50 (on a 4.00 scale) in their master's program. Students interested in applying to this program should submit the Graduate College online application. Applicants without a master's degree must have a minimum GPA of 3.60 (on a 4.00 scale) in the last two years of undergraduate course work and have graduated from an ABET-accredited undergraduate program.
Students interested in applying to this program must submit an online application to the Graduate College. In addition, an applicant whose native language is not English must demonstrate proficiency in the English language by meeting the English proficiency requirements stated on the Graduate College's website. International students seeking teaching assistantships must demonstrate proficiency in spoken English by scoring at least 26 on the speaking portion of the iBT or 50 on the ASU administered Speaking Proficiency English Assessment Kit (SPEAK).
Applicants should submit materials that reflect the hybrid nature of the arts/engineering degree, including a statement of purpose and curriculum vitae demonstrating interest and relevant experience in the area. Students will have the opportunity to upload their curriculum vitae and statement of purpose when completing the online application. Additionally, AME requires three letters of recommendation from individuals familiar with the applicant's ability to succeed in an interdisciplinary research environment.

## Contact Information:

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## Engineering, MEng (ESENGRMENG)

Online Degree Search Title: Master of Engineering (MEng)
Campus: ONLNE, TEMPE

Program Description: When pursuing a Master of Engineering (M.Eng.), students can customize their learning experience by selecting a curriculum that addresses their academic and professional goals. The M.Eng. is designed for working professionals and delivered entirely online to meet the unique needs of professional engineers. It is a practice-oriented degree.
In the M.Eng. program, multiple emphasis areas are available with additional areas under development. Within each area, there are specific course requirements in addition to the general program requirements. Students can select one of several areas of study available, such as:

- Embedded systems.
- Modeling and simulation.
- Quality and reliability.
- Systems engineering.

Engineers who enter the M.Eng. program have the opportunity to gain valuable experience applicable to their industry while gaining an advanced degree. Convenience and flexibility are key advantages of this program. The M.Eng., which can be earned entirely through distance learning, is a 30-credit-hour degree program that does not require GRE results, a thesis or on-campus attendance. Areas of study:

- Embedded systems.
- Modeling and simulation.
- Quality and reliability engineering.
- Systems engineering.

The M.Eng. is only available through distance learning. The degree program is supported through online courses available from the Ira A. Fulton Schools of Engineering.

Degree Requirements: 30 credit hours and a Written Comprehensive Exam or 30 credit hours and an Oral Comprehensive Exam or 30 credit hours including the required course (CSE 593 or IEE 593) and an Applied Project

- Students must complete a total of 30 credit hours equaling 10 courses to earn a M.Eng. One half of all course work, excluding the practice-oriented project, must be in engineering.
- Students must complete three credit hours of applied engineering mathematics and three credit hours of engineering management/business.
- A culminating event is required and will be identified by the student's advisory committee. It could be a final written or oral examination or the final report for a practice-oriented project. Additional requirements may exist for some academic units and emphasis areas of the M.Eng. program.


## Admission Requirements:

- The Graduate College online application.
- Bachelor's degree required with a background for the desired field of study.
- A minimum GPA of 3.00 , on a 4.00 scale, for the last 60 credit hours of the undergraduate transcript.
- Graduates of non-U.S. institutions must satisfy admission requirements established by the ASU Graduate College.
- Applicants whose native language is not English must provide evidence of English proficiency according to the guidelines defined by the ASU Graduate College.
- GRE scores are not required.


## Contact Information:

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## Engineering Science (Enterprise Systems Innovation and Management), MSE (ESIEEMSE) <br> Online Degree Search Title: Engineering Science (Enterprise Sys Innov and Mgmt) (MSE) <br> Campus: ONLNE, TEMPE

Program Description: The Ira A. Fulton Schools of Engineering offer a Masters of Science in Engineering (M.S.E.) in engineering science with an enterprise systems innovation and management concentration, providing enterprise and technology managers a wide range of analytical and strategic methods in enterprise systems, innovation and management. The core focus of the program includes enterprise product/service (offering) innovation, process and strategy innovation within the enterprise, in addition to enterprise management, asset, design and business model innovation.
The enterprise systems innovation and management concentration allows professionals the opportunity to enhance their leadership abilities and analytical thinking and bring value to their organization and professional advancement. In today's global environment, business execution is becoming increasingly competitive. Managing resources, products, and customers across the globe magnifies organizational challenges and requires more sophisticated systems, tactical thinking and advanced methods of measuring, analyzing and controlling performance. Managers must understand the underlying issues across the enterprise to impact and create business value.
The M.S.E. in engineering science with a concentration in enterprise systems innovation and management is only available through distance learning. The degree program is supported through online courses available from the Ira A. Fulton Schools of Engineering.

Degree Requirements: 30 credit hours including the required course (IEE 593) and an Applied Project

- Students must complete a total of 30 credit hours, equaling 10 courses, to earn an M.S.E.
- Students must complete a three-credit-hour applied project (IEE 593), three credits of applied engineering mathematics and three credits of engineering management/business.
- A culminating event is required and will be identified by the student's advisory committee. It could be a final examination or the final report for an applied project.
- Additional requirements may exist for some academic units.

Admission Requirements: Applicants must submit:

- The Graduate College online application.
- A minimum grade point average of 3.00 , on a 4.00 scale, for the last 60 credit hours of the undergraduate transcript.
- The schools attended and major of study completed are also significant factors in admission; an example of undergraduate degrees of applicants might include, but not be limited to, a B.S. in business, B.S. in mathematics or B.S. in engineering.
- Completion of a basic statistics course and calculus course is required for admission; a prerequisite course in industrial statistics and tools might be required for some students not meeting this requirement.
- GRE scores are not required.
- Applicants whose native language is not English must provide evidence of English proficiency according to the guidelines defined by the ASU Graduate College.


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## Engineering Science (Software Engineering), MSE (ESSFEMSE)

Online Degree Search Title: Engineering Science (Software Engineering) (MSE)
Campus: ONLNE, TEMPE
Program Description: The Master of Science in Engineering (M.S.E.) in engineering science with a software engineering concentration offers specialized courses founded on the fundamentals and principles of software engineering. The program provides the knowledge and skills needed to work as a software engineer or software task leader on both large and small projects using either agile methodologies or formal Capability Maturity Model Integration (CMMI) approaches. The program addresses major software development methodologies, techniques, tools and processes for both developing and managing software projects. The curriculum is based on the Software Engineering Body of Knowledge (SWEBOK) under the leadership of the IEEE Computer Society. Each course will place an emphasis on applied assignments and projects that are relative to the student's workplace.
The M.S.E. in engineering science with a concentration in software engineering is only available through distance learning. The degree program is supported through online courses available from the Ira A. Fulton Schools of Engineering.

Degree Requirements: 30 credit hours including the required course (CSE 593) and an Applied Project

- Students must complete a total of 30 credit hours equaling 10 courses to earn an M.S.E.
- Students must complete a three-credit-hour applied project (CSE 593), three credits of applied engineering mathematics and three credits of engineering management/business.
- A culminating event is required and will be identified by the student's advisory committee. It could be a final examination or the final report for an applied project.
- Additional requirements may exist for some academic units.

Admission Requirements: Applicants must submit:

- The Graduate College online application.
- Applicants must have earned a B.S. in computer engineering, software engineering or a related field.
- A minimum grade point average of 3.00 (on a 4.00 scale) in the last 60 credit hours of the undergraduate transcript (or for the last 12 units of the post-baccalaureate transcript).
- GRE scores are not required.
- Applicants whose native language is not English must provide evidence of English proficiency according to the guidelines defined by the ASU Graduate College.


## Contact Information:

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## Industrial Engineering, MS (ESINDENMS)

Online Degree Search Title: Industrial Engineering (MS)
Campus: ONLNE, TEMPE

Program Description: The Master of Science in industrial engineering degree program offers a thesis track and a non-thesis track. At the time of the admission, students' applications are considered primarily for the non-thesis track. After matriculating at Arizona State University, a student may consult and receive approval from the industrial engineering faculty to pursue the thesis track. Final consideration and approval will be given to students who have obtained an ASU graduate grade point average of 3.20.
Industrial engineering combines knowledge from the physical, mathematical and social sciences to design efficient manufacturing and service systems that integrate people, equipment and information. Improvements made by industrial engineers in automation information control and process quality revolutionized manufacturing in the past century and greatly increased our quality of life. Trends towards globalization, increased complexity and rapid technological innovation create an even greater need for industrial engineering in the 21st century.
Successful industrial engineering concepts are also spreading to the financial, logistics, and healthcare services industries, affording new areas of opportunity.
The faculty in industrial engineering are internationally recognized for their innovative research projects, funded both by government and industry. The industrial engineering program at ASU is ranked among the top 20 in the nation for graduate programs.

Degree Requirements: 30 credit hours and a Thesis or 30 credit hours and a Thesis (MIP) or 30 credit hours and a Written Comprehensive Exam or 30 credit hours and a Written Comprehensive Exam (MIP)

The M.S. in industrial engineering is a 30 credit hour program which has a thesis and a non-thesis track. The thesis track requires 24 credit hours of course work, six credit hours of thesis, and a final oral examination of the thesis. The non-thesis track requires 30 hours of coursework and a comprehensive exam. All students are required to take the following course work:

- IEE 505 Information Systems Engineering (3) or IEE 598 Design of Computational systems (3).
- IEE 545 Simulating Stochastic Systems (3).
- IEE 572 Design of Engineering Experiments (3) or IEE 578 Regression Analysis (3).
- IEE 574 Applied Deterministic Operations Research Models (3) or IEE 575 Applied Stochastic Operations Research Models (3).
- Three to four area courses.
- Zero to two elective courses.
- IEE 599 Thesis (6) (thesis track only)

Students must successfully defend the thesis or pass the comprehensive examination to graduate.
Admission Requirements: Applicants must submit a Graduate College online application in addition to the required application materials for the program. For more information on the program's application requirements, please visit our admission information page: http://engineering.asu.edu/graduate/ie/information.

## Contact Information:

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Industrial Engineering, PHD (ESINDENPHD)

Online Degree Search Title: Industrial Engineering (PhD)

## Campus: TEMPE

Program Description: The Ph.D. in industrial engineering program engages students in fundamental and applied research in industrial engineering to prepare for careers in academia, government, and industry. The overall educational objective of graduate study in industrial engineering is to improve each student's ability to understand, analyze, solve problems and perform original research. Industrial engineers develop qualitative and quantitative abilities to guide the design and operation of sustainable organizations and systems.
The faculty in industrial engineering are internationally recognized for their innovative research projects, funded both by government and industry. The industrial engineering program at ASU is ranked among the top 20 in the nation for graduate programs.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
The Ph.D. in industrial engineering requires a minimum of 85 credit hours after the bachelor's degree. Students are required to complete five core courses within the first year:

IEE 620 Optimization I (3)
IEE 598 Optimization II (3)
IEE 598 Stochastic Processes (3)
IEE 670 Mathematical Statistics (3)
IEE 598 Foundations of Information Systems Engineering (3)

After completion of the core courses, each student must take a qualifying exam in 4 of the 5 core courses prior to progressing in their academic degree. Students will also complete the following required courses:

IEE 594 Conference and Workshop (1)
IEE 700 Research Methods (1)
IEE 784 Teaching Internship (1)
IEE 790 Reading and Conference (1) or IEE 584 Internship (1), or an additional IEE 594 Conference and Workshop (1)
IEE 792 Research (12)
IEE 799 Thesis (12)

Students must also complete 42 credit hours of approved course work beyond the core and required courses.
Eligible students can request a Master's in passing after successfully completing the qualifying exam and completing 30 credit hours in the Ph.D. program.
A written and an oral comprehensive examination are required no later than the semester following completion of 57 credit hours of course work in the plan of study. The candidate must also successfully defend the dissertation prospectus and the dissertation research.

Admission Requirements: Students will submit an online application to the Graduate College. Required supplementary application materials include:

- A statement of purpose.
- GRE scores.
- Three letters of recommendation.

International students must meet the University's English Proficiency requirement prior to having the application processed. Please see http://graduate.asu.edu/admissions/internaionatl/english_proficiency.
At the time of application, all applicants must have successfully completed a minimum of 9 credit hours of calculus (Calculus I, II, III) with a grade of "C" (2.00) or higher.
A student with any deficiency course work must complete each deficiency with a grade of " $B$ " (3.00) or better within two semesters of admission to the program. Deficiency courses include:

CSE 110 Principles of Programming with Java
CSE 205 Concepts of Computer Science and Date Structures
IEE 376 Operations Research Deterministic Techniques/Applications
IEE 380 Probability and Statistics for Engineering Problem Solving
IEE 470 Stochastic Operations Research

For full consideration, the application deadline is Dec. 15 for fall semester and Sept. 15 for spring semester.

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## Materials Science and Engineering, PHD (ESENMATPHD)

Online Degree Search Title: Materials Science and Engineering (PhD)
Campus: TEMPE
Program Description: The faculty in the materials science and engineering program offer a Ph.D. in materials science and engineering at Arizona State University. This graduate program prepares students for professional careers in materials science and engineering and related fields in industry, government and educational institutions.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

## Credit Requirements

The Ph.D. in materials science and engineering consists of 84 hours of graduate work. A total of 10 lecture courses ( 30 credit hours) plus three hours of seminar are required. Students entering the program with a master's degree in materials science may apply up to 30 hours toward the Ph.D. plan of study, but must take five lecture courses at ASU. If the M.S. has not been completed, a maximum of 12 hours of graduate work may be applied with program approval.
Required Courses
The Ph.D. materials science and engineering program core requirements include 12 hours of graduate-level materials science and engineering courses. The following four courses (comprising these 12 hours) are required for all students:
Core Courses (12 hours)
MSE 523 Structure and Mechanical Properties (3)
MSE 524 Advanced Thermodynamics (3)
MSE 525 Physics of Materials or MSE 526/MSE 527 Materials Physics I and II (3)
MSE 561 Kinetics and Phase Transformations in Solids (3)
Electives (3-18 credit hours)
Students entering the Ph.D. program with a master's degree need to complete a minimum of 3 hours of elective coursework.
Students entering with a bachelor's degree are required to complete a minimum of 18 hours of elective coursework. Graduate elective courses may be selected from any of the graduate courses in the materials science and engineering curriculum as well as elective courses from related disciplines (e.g., chemistry, physics, electrical engineering), subject to approval by the faculty advisor. These courses should comprise a focused plan of study with emphasis in a particular area of materials science, organized in consultation with faculty supervisory committee.
Research (24-39 credit hours)
Students entering the Ph.D. program with a master's degree need to complete 24 hours of research (MSE 792). Students entering with a bachelor's degree are required to complete 39 hours of research (MSE 792).
Dissertation ( 12 credit hours)
All PhD students are required to complete 12 hours of dissertation (MSE 799). Note that 12 hours (and only 12) of dissertation credit (MSE 799) are required on the plan of study.
Seminar (3 credit hours)
The MSE 591 seminar is a one credit hour course. Students must take three credit hours (across three semesters) of seminar. The seminar course consists of a series of seminars presented by invited speakers and graduate students. Doctoral students are required to give a seminar presentation once during the academic year after they have begun their research.

Admission Requirements: Applicants to the Ph.D. program are required to submit the following:

- Application fee.
- Graduate College online admissions application.
- GRE score.
- Official transcripts.
- Personal statement.
- Resume or curriculum vitae.
- Test of English as a Foreign Language (TOEFL) score for international students.
- Three letters of recommendation.

Once the application file is complete, the file is forwarded to the faculty admissions committee for evaluation and recommendation. Financial aid is available to highly qualified students. The most common type of financial aid is teaching and research assistantships, which are accompanied by waivers of tuition and major medical insurance benefit. Other types of financial aid include Ira A. Fulton Schools of Engineering fellowships and Science Foundation Arizona fellowships.

## Contact Information:

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Materials Program
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## Materials Science and Engineering, MS (ESMATEMS)

Online Degree Search Title: Materials Science and Engineering (MS)
Campus: ONLNE, TEMPE

Program Description: The faculty in the materials science and engineering program offer a Master of Science (M.S.) in materials science and engineering. This degree requires a thesis. This graduate program prepares students for professional careers in materials science and engineering and related fields in industry, government and educational institutions.

Degree Requirements: 32 credit hours and a Thesis or 32 credit hours and a Thesis (MIP) or 32 credit hours and an Applied Project or 32 credit hours and an Applied Project (MIP)

Core Courses (6 credit hours)
Students must take six hours of core courses selected from the list below. Note that the last choice requires both MSE 526 and 527 but only the MSE 526 may be counted as a technical elective. This selection is most appropriate for students who have some background in modern physics.
MSE 523 Structural and Mechanical Properties of Materials (3)
MSE 524 Advanced Thermodynamics (3)
MSE 561 Phase Transformations, Kinetics, and Diffusion in Solids (3)
MSE 525 Physics of Materials (3)
MSE 526, 527 Materials Physics I and II (6)
Technical Electives (18 credit hours)
Students must take 18 hours of technical electives, with the following conditions:

- Either IEE 570 Advanced Quality Control or IEE 572 Design of Experiments are highly recommended.
- Up to six credit hours may be at the 400 or higher level.
- Up to nine credit hours may be taken from disciplines outside materials, with advisor's approval.
- Up to three credit hours of MSE 590 Reading and Conference may be taken in place of a three credit hour elective, with advisor's approval.


## Seminar

Students must take two hours (across two semesters) of MSE 591 Seminar. The seminar is a one hour course.

## Thesis

Students must take six hours of Thesis (MSE 599), complete a thesis and pass the thesis defense examination.
Admission Requirements: Admission to the Materials Science and Engineering graduate programs is highly competitive. The program cannot determine an applicant's chances of admission in advance. The application deadline for the fall semster is January 15; spring semester is September 30. Applicants ot the M.S. program are required to submit the following:

- Application fee.
- Graduate College online admission application.
- GRE score.
- Official transcripts.
- Personal statement.
- Resume or curriculum vitae.
- Test of English as a Foreign Language (TOEFL) score for international students.
- Three letters of recommendation.

Financial aid in the form of teaching and research assistantships are generally not available to master's students. However, students are encouraged to seek out fellowships or scholarships for which they may be eligible. Students may also contact the ASU Student Financial Assistance Office for information on grants and loans.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Materials Program
http://engineering.asu.edu/emte
ECG 202
semte@asu.edu
480-727-9314

## Materials Science and Engineering, MSE (ESMATEMSE)

Online Degree Search Title: Materials Science and Engineering (MSE)
Campus: ONLNE, TEMPE
Program Description: The materials science and engineering program faculty offer a Master's of Science in Engineering (M.S.E.) in materials science and engineering. This degree does not require a thesis. The program is intended for students who are working fulltime in industry. Many of the courses are offered online. Three concentration options are available:

- General.
- Semiconductor processing and packaging (SPP) packaging track.
- Semiconductor processing and packaging (SPP) processing track.

Degree Requirements: 32 credit hours and an Applied Project or 32 credit hours and an Applied Project (MIP)
A total of 32 credit hours are required for the M.S.E. in materials science and engineering. Students must take 24 credit hours of technical electives, two credit hours of seminar (MSE 591) and six credit hours of applied project (MSE 593) with the following conditions:

- Either IEE 570 Advanced Quality Control or IEE 572 Design of Experiments are highly recommended as technical electives.
- Up to six credit hours of electives may be taken at the 400-level or higher.
- Up to nine credit hours may be from disciplines outside materials, with advisor approval.
- The seminar (MSE 591) is a one credit hour course. Reading and conference (MSE 590) may be taken, with advisor approval, in place of seminar for online students.

Applied project credits (MSE 593) are conducted under the guidance of a faculty member, but can be done remotely. Students must consult the faculty advisor and have an approved applied project plan on file prior to enrolling in applied project course.
Culminating Event
The culmminating event consists of an oral presentation before the supervisory committee, in which the student must present the findings in their applied project report, as well as answer questions garnered from the coursework they have completed in the program. The report, typically 25 pages in length, is on a topic of the student's choice and approved by the supervisory committee. Arrangements can be made for the distance learning students to conduct an oral examination by telephone or an online meeting program.

Admission Requirements: Applicants to the M.S.E. program are required to submit the following:

- Application fee.
- Graduate College online admission application.
- Official transcripts.
- Personal statement.
- Resume or curriculum vitae.
- Test of English as a Foreign Language (TOEFL) score for international students.
- Three letters of recommendation.

GRE scores are not required for admission to the M.S.E. program.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Materials Program
http://engineering.asu.edu/emte
ECG 202
semte@asu.edu
480-965-2335

## Mechanical Engineering, MS (ESMEMS)

Online Degree Search Title: Mechanical Engineering (MS)
Campus: TEMPE

Program Description: The mechanical engineering faculty offer a graduate program leading to the M.S. in mechanical engineering. A number of wide and diverse research areas may be pursued. All of the graduate programs stress a sound foundation leading to a specialized area of study. In order to gain admission to the MS program, qualified applicants must secure a faculty advisor prior to admission. Qualified applicants who have not secured a faculty advisor prior to admission decisions being made may be offered admission to the MSE program, with opportunity to move to the MS after a thesis chair has been obtained. Additional information can be found in the Graduate Guidelines on the school website.

Degree Requirements: 30 credit hours and a Thesis
The student is encouraged to select a program committee chair (faculty advisor) as soon as possible but must select a program committee chair prior to completing 15 credit hours. The name of the student's program committee chair must be filed with the graduate programs office via the interactive plan of study (iPOS). A change of program committee chair requires approval of the Graduate Program Chair.
The program committee chair, in consultation with the student, will establish a Master of Science Program Committee (MSPC). The MSPC shall be composed of a minimum of three members from the ASU faculty with at least two being from the mechanical engineering graduate faculty. Participation of individuals from institutions external to ASU is encouraged but these shall be nonvoting members.
As soon as possible, but prior to completing 15 credit hours, the student, in consultation with the program committee chair, must file an iPOS with the university. The MSPC and the Graduate Program Chair must approve changes to the iPOS.
The iPOS must be in accordance with university and program requirements. For students currently enrolled in a master's degree program at another institution and wishing to transfer to ASU, note that a maximum of nine graduate credit hours may be counted toward an M.S. at ASU. A minimum cumulative GPA of 3.00 is required throughout the program. Candidates for the M.S. must complete a minimum of 30 credit hours of course and thesis work distributed as follows:

- At least 12 credit hours of MAE graduate course work ( 500 level and above). Non-MAE graduate courses may be substituted upon the approval of the MAE Graduate Affairs Committee
- At least six credit hours of graduate mathematics-oriented courses ( 500 level and above). Students are strongly encouraged to take MAE 501 Linear Algebra in Engineering and MAE 502 Partial Differential Equations in Engineering.
- At least six credit hours of additional graduate courses; these may be either MAE or non-MAE courses, and are not restricted to science, mathematics or engineering. A maximum of three credit hours of MAE 584 Internship may be counted towards this requirement. A combined maximum of six credit hours of MAE 591 Seminar, MAE 594 Graduate Research Conference, or MAE colloquium classes, such as MAE 580 Solar Energy Colloquium, may be counted towards this requirement.
- Six hours of MAE 599 thesis. Students are required to have six hours of thesis credit on the iPOS.

A final defense of the thesis will be administered by the Master of Science Program Committee.

## Admission Requirements:

- Students interested in applying to this program must submit an online application to the Graduate College. A minimum GPA of 3.00 (on a 4.00 scale) is required for graduates from accredited U.S. institutions. The Graduate College is responsible for international GPA interpretation.
- All applicants are required to take the general GRE.
- Students who do not have English as their primary language are required to achieve a minimum score of 80 on the internetbased Test of English as a Foreign Language (TOEFL).
- Three letters of recommendation are required, using the on-line recommendation system.
- All applicants are required to submit a statement of academic and career objectives and address the desire to pursue graduate studies at ASU in mechanical engineering.


## Contact Information:

Engineering, Ira A. Fulton Schools of
Mechanical and Aerospace Engineering Program
http://engineering.asu.edu/emte
ECG 202
semte@asu.edu
480-965-2335

## Mechanical Engineering, MSE (ESMEMSE)

Online Degree Search Title: Mechanical Engineering (MSE)
Campus: TEMPE

Program Description: The mechanical engineering faculty offer a graduate program leading to the M.S.E. in mechanical engineering. A number of wide and diverse research areas may be pursued. All of the graduate programs stress a sound foundation leading to a specialized area of study. Additional information can be found in the program guidelines on the school website.

Degree Requirements: 30 credit hours and a Written Comprehensive Exam (MIP) or 30 credit hours and an Applied Project or 30 credit hours and an Oral Comprehensive Exam

The M.S.E. is the professional master's degree. The student is encouraged to select a program committee chair (faculty advisor) as soon as possible but must select a program committee chair prior to completing 15 credit hours. The name of the student's program committee chair must be filed with the graduate programs office via the interactive plan of study (iPOS). A change of program committee chair requires approval of the Graduate Program Chair.
The program committee chair, in consultation with the student, will establish a Master of Science in Engineering Program Committee (MSEPC). The MSEPC shall be composed of a minimum of three members from the ASU faculty with at least two being from mechanical, aerospace, chemical and materials engineering faculty.
As soon as possible, but prior to completing 15 credit hours, the student, in consultation with the program committee chair, must file an iPOS with the University. The MSEPC and the Graduate Program Chair must approve changes to the iPOS.
The iPOS must be in accordance with university and program requirements. For students currently enrolled in a master's degree program at another institution and wishing to transfer to ASU, note that a maximum of nine graduate credit hours may be counted toward an M.S.E. at ASU. A minimum cumulative GPA of 3.00 is required throughout the program. Candidates for the M.S.E. must complete a minimum of 30 credit hours of course work distributed as follows:

- At least 15 credit hours of course work directly related to a research area.
- At least six credit hours of mathematics.
- At least nine credit hours of graduate courses outside the major research area; these may be engineering, science, mathematics or other areas approved by the student's program committee, the director of graduate studies and the Graduate Program Chair.

A final comprehensive examination or applied project will be administered by the committee. The purpose of this culminating event is to determine the student's ability to integrate the knowledge gained in his or her course work.

## Admission Requirements:

- All applicants are required to submit a statement of academic and career objectives and address the desire to pursue graduate studies at ASU in mechanical engineering.
- All applicants are required to take the general GRE.
- Students interested in applying to this program must submit the Graduate College online application. A minimum GPA of 3.00 (on a 4.00 scale) is required for graduates from accredited U.S. institutions. The Graduate College is responsible for international GPA interpretation.
- Students who do not have English as their primary language are required to achieve a minimum score of 80 on the internetbased Test of English as a Foreign Language (TOEFL).
- Three letters of recommendation are required, using the on-line recommendation system.


## Contact Information:

Engineering, Ira A. Fulton Schools of Mechanical and Aerospace Engineering Program

## Mechanical Engineering, PHD (ESMEPHD) <br> Online Degree Search Title: Mechanical Engineering (PhD) Campus: TEMPE

Program Description: The graduate programs in mechanical engineering accommodate individual interests and encourage independent and innovative study. Students are part of a diverse intellectual community dedicated to advancing the state of the art and practice of mechanical engineering. All graduate programs stress a sound foundation in technical fundamentals, communication and professionalism. Additional information can be found in the graduate guidelines on the school website.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
The Ph.D. is directed toward original research. Students are required to write and defend a dissertation describing an original contribution within the discipline. The student must select a program committee chair (faculty advisor) prior to completing 42 credit hours. A change of program committee chair requires approval of the Graduate Program Chair.
A graduate student pursuing a Ph.D. program of study in mechanical engineering, must complete within the first year of graduate studies at ASU, three 500-level (preferably core) courses in the major research area and one 500-level mathematics course with an average GPA of 3.25 or higher. Specific qualifying course requirements for each major research area are identified in the Mechanical Engineering Graduate Handbook.
The program committee chair, in consultation with the student, will establish a program committee, with the purposes to:

- Approve the plan of study (iPOS).
- Provide guidance for the student's research.
- Administer the comprehensive examinations.
- Administer the dissertation defense.

The program committee shall consist of at least five ASU faculty with the majority being from mechanical, aerospace, chemical and materials faculty with at least one being from outside of these academic disciplines. Additional information regarding the composition of the committee can be found in the Graduate Student Handbook.
The student, in consultation with the program committee chair and committee, must file an iPOS prior to completing 42 credit hours. The iPOS must meet general university requirements, including the need for rigorous fundamental knowledge of engineering principles. Ph.D. candidates must complete a minimum of 84 credit hours of course and dissertation work in total for degree requirements. Thirty credit hours of appropriate course work from a previously earned master's degree may be applied toward the total credit hours; at least 54 hours must be taken at ASU after admission to the Ph.D. program. A minimum cumulative GPA of 3.25 is required. Degree requirements are distributed as follows:

- At least 18 credit hours of course work directly related to the research area (major).
- At least nine credit hours of mathematics.
- At least nine credit hours of graduate elective courses outside the major research area; these must be in mathematics, engineering and/or science.
- Twelve credit hours of MAE 799 dissertation.
- MAE 792 research credit hours.

All students pursuing the Ph.D. are required to pass a comprehensive examination.

## Admission Requirements:

- All applicants are required to take the general GRE.
- All applicants are required to submit a statement of academic and career objectives and address the desire to pursue graduate studies at ASU in mechanical engineering.
- Student interested in applying to this program must submit the Graduate College online application. A minimum GPA of 3.00 (on a 4.00 scale) is required for graduates from accredited U.S. institutions. The Graduate College is responsible for international GPA interpretation.
- Students who do not have English as their primary language are required to achieve a minimum score of 80 on the internetbased Test of English as a Foreign Language (TOEFL).
- Three letters of recommendation are required, using the online recommendation system.


## Contact Information:

Engineering, Ira A. Fulton Schools of
Mechanical and Aerospace Engineering Program
http://engineering.asu.edu/emte
ECG 202
semte@asu.edu
480-965-2335

## Mechanical Engineering (Engineering Education), PHD (ESMEEEDPHD)

Online Degree Search Title: Mechanical Engineering (Engineering Education) PhD
Campus: TEMPE
Program Description: Students pursuing the Ph.D. in mechanical engineering are eligible to apply for the engineering education concentration. The engineering education concentration is interdisciplinary and will combine research in engineering with research in education. The doctoral engineering education concentration will prepare students to become scholars, researchers or practitioners in academia. The proposed concentration provides students with an opportunity to explore pedagogy, methodology, curriculum and instruction and apply it to engineering.
Students enrolled in the engineering education concentration under the Ph.D. in mechanical engineering will complete 18 credit hours of graduate-level engineering course work with a specific research focus and 15 hours of graduate-level education course work. The program is directed toward original research. Students will be required to write and defend a dissertation that describes an original contribution within the chosen engineering discipline that integrates an education component (i.e., research on engineering pre-university programs, undergraduate engineering curriculum and instruction, etc.). The research results should be suitable for publication in a reputable journal. Students will be required to satisfy all mechanical and aerospace engineering qualifying and comprehensive requirements and to abide by all policies set forth by the Ira A. Fulton Schools of Engineering.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

The Ph.D. in aerospace engineering with an engineering education concentration requires the following:

- Eighteen credit hours will be taken in the major engineering research area.
- Nine credit hours of appropriate mathematics courses.
- Twelve credit hours of dissertation.
- Fifteen credit hours of appropriate education courses in methodology, curriculum and instruction; research hours will be taken as required.
- Thirty credit hours of appropriate course work may be accepted from a previously earned engineering master's degree.

Students admitted without a previously earned master's degree (i.e., directly from a bachelor's degree), will be required to take 30 credit hours of a combination of course work and research related to the student's dissertation research as deemed necessary by the student's dissertation supervisory committee.

Admission Requirements: All applicants are required to submit the Graduate College online application, meet all Graduate College admission criteria, and take the general GRE; a subject-specific GRE is not required. Other requirements are as follows:

- A minimum GPA of 3.00 ( 4.00 scale) for graduates of accredited U.S. institutions. ASU's Graduate College is responsible for international GPA interpretation.
- A statement of academic and career objectives and address the desire to pursue an engineering education concentration in Ph.D. in mechanical engineering (statement of purpose).
- Students whose native language is not English are required to achieve minimum English proficiency requirements as specified by the Graduate College.
- Three letters of recommendation, using the format specified by the unit.


## Contact Information:

Engineering, Ira A. Fulton Schools of

## Natural Science (Middle School Science, Technology, Engineering and Mathematics), MNS (GCSTMMNS)

Online Degree Search Title: Middle School Sci, Tech, Engr, and Math (MNS)
Campus: TEMPE

Program Description: The middle school science, technology, engineering and mathematics concentration under the Master of Natural Science degree program is a focused course of study for K-8 certified teachers, providing them with integrated content in STEM subject matter that enables them to be considered highly qualified by the No Child Left Behind Act. In addition, the concentration utilizes sustainability research and integrates STEM content around sustainability. Its target audience is middle school teachers as opposed to secondary certified teachers or secondary mathematics teachers and applied mathematicians. Although most program applicants will hold a valid teaching certificate, it is not required that they do so for admission. The program would also be appropriate for informal mathematics and science educators such as education outreach coordinators for industry and museums.

Degree Requirements: 30 credit hours including the required course (PHS 593 or STM 593) and an Applied Project

The distribution of courses for this concentration are:
Required core course (3):
STM 501 Introduction to Modeling in STEM
Required concentration courses (21):
STM 502 Cognition and Instruction in STEM
STM 503 Mathematical Modeling
STM 504 Modeling Integrated Science
STM 505 Engineering Design
STM 511 Classroom Applications in STEM
STM 512 Quantitative Modeling
STM 513 Sustainability Science
Elective course (3).
Culminating experience:
STM 593/PHS 593 Applied Project
Total credit hours: 30

Admission Requirements: Bachelor's degree from a regionally accredited university with a junior-senior GPA of 3.00 (no particular major is required but the applicant must be a K-8 educator).
Satisfactory score on ASU Mathematics Department's online mathematics placement examination or completion of STM 494 Foundations in Mathematics for Middle School Teaching.
Students must meet all admissions criteria of the Graduate College and must submit an online application for admission.

## Contact Information:

Engineering, Ira A. Fulton Schools of
School for Engineering of Matter,Transport \& Enrgy
http://modelit.asu.edu
ECG 202
semte@asu.edu
480-965-2113

## Nuclear Power Generation (certificate), CERT (ESNPGGRCT)

Online Degree Search Title: Nuclear Power Generation (Grad Certificate)
Campus: ONLNE, TEMPE
Program Description: The nuclear power generation (NPG) graduate certificate is a multidisciplinary professional option within the Ira A. Fulton Schools of Engineering. The goal of the NPG certificate program is to prepare students and professionals from a variety of engineering and scientific disciplines to work effectively in the nuclear power industry. The certificate program offers students a comprehensive, interdisciplinary education as courses from multiple academic units constitute both the core and elective classes available to the student.
Students typically begin with the study of nuclear science and engineering fundamentals. Subsequent core courses focus on:

- Operational safety.
- Power plant dynamics.
- Reactor theory.
- Structural materials.

Elective courses allow students to tailor the remaining studies toward facilitating their career goals and focusing on studies tied to their discipline. The primary mode of instructional delivery is online using the facilities of the engineering office of Global Outreach and Extended Education (GOEE).

Degree Requirements: 18 credit hours

Admission Requirements: Applicants who hold a bachelor's degree in an engineering or science discipline, such as physics, chemistry and mathematics, from a regionally accredited institution are eligible to apply to the program. Applicants are required to submit:

- An official ASU graduate online application.
- Official transcripts of all undergraduate and graduate course work.
- A statement of career and educational goals.

Regular admission may be granted to applicants who have achieved a GPA of 3.00 ( 4.00 scale) or better in the last two years of work leading to a bachelor's degree and are competitive in the applicant pool.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Department of Electrical Engineering
http://engineering.asu.edu/ecee
GWC 222
askee@asu.edu
480-965-3424

## Solar Energy Engineering and Commercialization, PSM (ESSEECPSM)

Online Degree Search Title: Solar Energy Engineering and Commercialization (PSM) Campus: TEMPE

Program Description: The Professional Science Master's in solar energy engineering and commercialization offers advanced, interdisciplinary education in solar energy to students with backgrounds in science, technology, engineering or mathematics (STEM). The objective of the program is to enable graduates to pursue careers in industry, government or the nonprofit sector that involve solar energy and its utilization. Students in the program must select courses from both technical and nontechnical tracks, including solar energy policy, spanning a number of academic programs and schools. Opportunities exist for engagement with the solar energy industry and/or government policymakers, leading to a required culminating applied research project. The degree program is meant to be completed in 12 months for full-time students.

Degree Requirements: 30 credit hours including the required course (MAE 593) and an Applied Project

The P.S.M. in solar energy engineering and commercialization requires the following:

- Core courses (9 credit hours).

EEE 565 Solar Cells
MAE 580 Solar Energy Colloquium GCU/PUP 549 Solar Energy and Public Policy

- Elective Courses (15 credit hours).
- MAE 593 Applied Project (6 credit hours).


## Admission Requirements:

- Completed application to the Graduate College.
- A graduate degree from a regionally accredited U.S. college or university of recognized standing in a related field such as science, technology, engineering or mathematics (STEM).
- GRE required.
- Minimum of a 3.00 cumulative GPA (4.00=A scale) in the last 60 hours of a student's bachelor's degree program.
- Minimum of a bachelor's degree from a regionally accredited institution or the equivalent of a U.S. bachelor's degree from an international institution that is officially recognized by that country.


## Contact Information:

Engineering, Ira A. Fulton Schools of
School for Engineering of Matter,Transport \& Enrgy
PSMSolarEnergy.engineering.asu.edu
ERC 305
PSM.Solar.Energy@asu.edu
480-965-1625

## Sustainable Technology and Management (certificate), CERT (SUSUTECHCE)

Online Degree Search Title: Sustainable Tech \& Management (Grad Certificate)
Campus: ONLNE, TEMPE
Program Description: The certificate in sustainable technology and management is an interdisciplinary program that helps managers, engineers and organizations meet the business and engineering imperatives of sustainable development in a globalizing and increasingly competitive economy.
Students will be presented with metrics and skill sets that will enhance the development of sustainable technologies, entrepreneurship and organizational strategy. The net benefit will be reduced risks and costs, and increased competitive advantages through strategic alliances, scenario planning and resource management.

Degree Requirements: 15 credit hours
Students will work with a faculty advisor to select their course work.
Students will complete a capstone project supervised by a faculty advisor, which will demonstrate complex engineering-
management problem solving for sustainability and technologies. This will include:

- Comparative analysis of options.
- Detailed business plans.
- A presentation to the faculty, advisory committee, and invited members of the community.
- Technical evaluations and recommendations.

Students are expected earn a "B" (3.00) or better in each course. It is also expected that they complete the program in three years, but can finish the program in one or two years depending on how many courses they take each semester.

Admission Requirements: Students must have a bachelor's or master's degree from a regionally accredited institution with a cumulative grade point average of 3.00 or higher, on a 4.00 scale, or be currently admitted to a graduate degree program at ASU. Students are required to apply for this certificate program through the Graduate College online application. Students are required to submit official copies of all undergraduate and graduate transcripts to the Graduate College. ASU transcripts do not need to be sent. If a student has already submitted these to ASU, they do not need to resend them.
A personal statement and resume must be submitted along with the CSTM application. Preference will be given to students with degrees in business, engineering, the sciences or public policy.
Applicants whose native language is not English must demonstrate proficiency in the English language by meeting the Graduate College's English proficiency requirements.
Students are required to apply to the certificate program before completing more than six credit hours of the required courses for the certificate.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Civil, Environmental and Sustainable Eng Program
http://engineering.asu.edu/sebe
ECG 251
sebe.advising@asu.edu
480-965-0595

## Graduate College

Biological Design, PHD (GCBDSPHD)
Online Degree Search Title: Biological Design (PhD)
Campus: TEMPE

Program Description: The doctoral program in biological design seeks to develop a new type of scientist by training students in core disciplines related to biomedicine/biotechnology while simultaneously preparing them to participate successfully in the interdisciplinary research teams of the future.
The research emphasis is on projects that are use-inspired, contributing directly to solutions for important societal challenges. This is a highly mentored program of personalized study that provides significant interaction with the large and vibrant local research community. Students are expected to complete the program in four to five years.
The key distinguishing features of the curriculum are:

- A personalized program of study that allows students to explore the disciplinary and interdisciplinary areas of greatest interest.
- A two-semester core course sequence that will provide core training in relevant bio-related areas.
- Encouragement to choose dissertation research projects that are use-focused, contribute to solving a large-scale challenge and promise rich interdisciplinary experiences.
- Opportunities to participate in special seminars and outreach activities to encourage broad research interactions.
- Students accepted into the Biological Design Graduate Program will be supported by the program in the first year and through fellowships and as research associates through the remainder of their studies.
- Three 10-week laboratory rotations during the first year of study. Rotations can be in any ASU laboratory provided it is centered largely on biological research.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation Required course work includes:
BDE 701 Fundamentals of Biological Design I (9)
BDE 702 Fundamentals of Biological Design II (3)
BDE 721 Integrative Research (3)
BDE 722 Research Design (3)
BDE 751 Teaching in Science (2)
BDE 792 Research (every semester)
BDE 799 Dissertation (12)
Specialized Disciplinary Courses (6 minimum)
Admission Requirements: Applications for the Biological Design Graduate Program are taken and processed through the ASU Graduate College. The application deadline for the program is Jan. 1st.
Prior to submitting the online application, candidates should prepare the following documents:

- GRE test scores: The institution code for ASU is 4007 and the departmental code is 0000 . Subject test scores are also recommended but not required.
- Letters of Recommendation: Three letters of recommendation relative to the candidate's academic career are required.
- Personal statement: This document should reflect the candidate's career and educational goals, and should explain why they are interested in pursuing this program. Candidates should describe their prior and current research experience.
- Resume: The resume should include prior research and employment experience, honors, awards, memberships held, publications, etc.

For additional Graduate College application requirements, including transcripts, fees and international application requirements, please see the college's website.

## Contact Information:

Graduate College
http://biologicaldesign.asu.edu/
BD A320CB
biologicaldesign@asu.edu
480-727-9298

## Biomedical Informatics, MS (ESBIOINFMS)

Online Degree Search Title: Biomedical Informatics (MS)
Campus: DTPHX, TEMPE
Program Description: The M.S. in biomedical informatics is designed to meet the rapidly growing need for professionals in the field with preparation that integrates technological expertise in informatics, computer sciences, biosciences and mathematical statistics with a knowledge of the clinical environment in the health care professions.
The program features a sequence of courses specifically designed to bring together clinicians and researchers in teams, applying new developments in informatics theory to clinical practice. This program is supported by a broad set of collaborators including Banner

Health, Barrow Neurological Institute, Mayo Clinic/Phoenix Program and The University of Arizona College of Medicine. This approach makes the M.S. in biomedical informatics program at ASU distinctive, if not unique, among biomedical informatics programs in the United States. Students will take courses in such areas as public health, clinical environments, bioinformatics, and statistics.

Degree Requirements: 32 credit hours a Written Comprehensive Exam and an Oral Comprehensive Exam (MIP) or 32 credit hours a Written Comprehensive Exam and including a Capstone Course (BMI 592)

Due to the diverse academic backgrounds of students requesting admission into this program, many will find it necessary to take some course work in preparation. However, all students will take 32 credit hours of graduate-level course work including 14 hours of mandatory course work as outlined below:
BMI 501 Introduction to Biomedical Informatics (3)
BMI 502 Foundations of Biomedical Informatics Methods I (3)
BMI 505 Foundations of Biomedical Informatics Methods II (3)
BMI 540 Problem Solving in Biomedical Informatics (3)
BMI 570 Symposium (2)
The remaining hours include six hours of elective course work and six hours of research credit to be applied to the completion of a scientific paper.

Admission Requirements: Students interested in applying to this program must submit an online application to the Graduate College. An applicant to the M.S. in biomedical informatics program should have earned a bachelor's degree in biology, computer science, engineering, nursing or statistics.
Applicants who have earned degrees in other unrelated fields with appropriate academic backgrounds will also be considered. However, all applicants must have basic competencies in college-level calculus (similar to MAT 270), general biology (similar to BIO 188) or physiology, statistics (similar to STP 226) and basic computer programming (similar to CSE 100 or 110).

The applicant's undergraduate GPA, statement of purpose and depth of preparation in their field are the primary factors affecting admission. Every applicant must submit scores for the GRE or any other graduate-level entry examination. An international student must also submit Test of English as a Foreign Language (TOEFL) scores.

## Contact Information:

## Graduate College

Biomedical Informatics Program
http://bmi.asu.edu
ABC1
Kaitlin.Yacob@asu.edu
602-827-2547

## Biomedical Informatics, PHD (ESBMIPHD)

Online Degree Search Title: Biomedical Informatics (PHD)
Campus: DTPHX

Program Description: The biomedical informatics faculty offers a graduate program leading to the Ph.D. in biomedical informatics. The core program features courses specifically designed to bring together clinicians, biological scientists and informatics researchers to apply new developments in informatics theory to clinical or biological practice.
Additional concentration course work in an area of focus and emphasis on independent research are intended to place these students at the leading edge of the field. Strong collaborative relationships with a variety of health care organizations, the bioscience industry and governmental agencies provide an unparalleled opportunity for doctoral students to explore and contribute to advances in bioinformatics and informatics related to imaging, clinical medicine and public health. Students may explore special foci on cross-cutting areas, such as data mining, predictive modeling and simulation.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

Due to the diverse academic backgrounds of students requesting admission into this program, many will find it necessary to take some course work in preparation. However, all students will take 84 credit hours of approved graduate-level course work, including 19 credit hours of mandatory courses listed below:
BMI 501 Introduction to Biomedical Informatics (3)
BMI 502 Foundations of Biomedical Informatics Methods I (3)
BMI 505 Foundations of Biomedical Informatics Methods II (3)

BMI 515 Advanced Biostatistical Methods (3)
BMI 540 Problem Solving in Biomedical Informatics (3)
BMI 560 Teaching in Biomedical Informatics (2)
BMI 570 Symposium (2)
Students must also complete a dissertation and pass written and oral comprehensive examinations.
Admission Requirements: Students interested in applying to this program must submit an online application to the Graduate College. An applicant to the Ph.D. in biomedical informatics program should have earned a bachelor's degree in biology, computer science, engineering or statistics or be trained as a post-bachelor's health professional in medicine, nursing or pharmacy. Student applicants who have earned degrees in other unrelated fields with appropriate academic backgrounds will also be considered. However, all applicants must have basic competencies in anatomy and physiology, college calculus, computer programming, general biology and statistics.
The applicant's undergraduate GPA, statement of purpose and depth of preparation in their field are the primary factors affecting admission. Every applicant must submit:

- Scores for the GRE (verbal, quantitative and analytical required; the subject test is optional) or any other graduate-level entry examination.
- An international student must also submit Test of English as a Foreign Language (TOEFL) scores.


## Contact Information:

Graduate College
Biomedical Informatics Program
http://bmi.asu.edu
ABC1
Kaitlin.Yacob@asu.edu
602-827-2547

## Human and Social Dimensions of Science and Technology, PHD (GCHSDSTPHD)

Online Degree Search Title: Human and Social Dimensions of Science and Technology (PhD) Campus: TEMPE

Program Description: This program prepares students to teach and conduct research on the conceptual, historical, social and policy foundations of science and technology, as well as their interactions with society, using humanistic and social science methods. The Ph.D. in human and social dimensions of science and technology responds to growing demand for interdisciplinary research in the humanities and social sciences that can provide insights into the dynamic relationship between science, technology and society. Solutions to the problems of applying science and technology to human wellbeing can only be found by fully integrating research from across many social science and humanities disciplines. The Ph.D. in HSD program is flexible, combining a strong, integrated, first-year experience, with substantial freedom for students, in conjunction with their advisors, to design carefully crafted programs of study relevant to their own areas of specialization and expertise. Unique among programs of this kind nationally, students will also learn to communicate and work with scientists, engineers, policy, business and community officials, and/or the public in conducting and applying research.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
The Ph.D. in HSD is a research degree, culminating in a dissertation, which must draw on multiple disciplinary perspectives. Students may apply up to 30 hours from a prior master's degree towards the total hour requirement upon approval of the steering committee. Each student, with his or her supervisory committee, develops a unique program of study, which the student's supervisory committee approves.
Each student completes a yearlong core seminar, a second-year research project, two major fields, one minor field, methods training, electives and research. Students also regularly attend the program colloquia. There are no foreign language or statistics requirements, except as needed for a particular student's selected dissertation project.
Comprehensive Examination
The written dissertation prospectus and its oral defense constitute the written and oral comprehensive examinations required by the Graduate College for advancement to candidacy. Each student develops a written dissertation prospectus, including a bibliography and discussion of relevant research skills. The student makes an oral defense of the dissertation prospectus to his or her supervisory committee, which must approve the prospectus. Students normally complete the dissertation prospectus and its defense in the fifth semester.
Dissertation

The Ph.D. dissertation represents an original body of research that contributes to existing knowledge in a significant way.

## Final Examination

Upon completing the dissertation, the student makes an oral defense of the dissertation to his or her supervisory committee, which must approve the dissertation. The Ph.D. is granted upon successful completion of the oral defense and any revisions to the dissertation required by committee members.

Admission Requirements: Preference is given to students with demonstrated interest and competence in relevant areas of intellectual work. All students must hold an undergraduate degree from a regionally accredited institution or university of recognized standing when they enter and have a minimum GPA of 3.00 on a 4.00 scale for the last 60 semester hours of undergraduate work.
The HSD program admits one cohort annually for plans of study that begin in the fall semester. The deadline for applications is Dec. 15 for students wishing to begin a program of study the following August. There is no guarantee that applications received after Dec. 15 will be reviewed.
To apply to the program, applicants are required to submit:

- An official ASU graduate application.
- Official transcripts of all undergraduate and graduate course work.
- The HSD academic record form.
- A curriculum vitae or resume.
- A statement of proposed research program that clearly identifies why the student feels ASU is the appropriate place to pursue his or her Ph.D. degree and identifies one or more faculty members whose interests and/or work are relevant to the student's proposed research.
- A writing sample.
- General GRE scores.
- Three academic letters of recommendation.
- If you are from a country whose native language is not English, provide proof of English proficiency with one of the following:
- TOEFL score of 600 paper-based or 100 internet-based.
- IELTS overall band score of at least 6.5 with no band below 6.0.
- Pearson Test of English (PTE) score of at least 60.

Regular admission may be granted to applicants who meet Graduate College admission requirements.

## Contact Information:

Graduate College
http://hsd.asu.edu
INTDS B 360C
hsd@asu.edu
480-965-1778

## Neuroscience, PHD (GCBMENPHD)

Online Degree Search Title: Neuroscience (PHD)
Campus: TEMPE
Program Description: Neuroscience involves the study of the nervous system and its relation to an organism's function. It encompasses how gene and nerve networks interact with the environment throughout an organism.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

The Ph.D. in neuroscience degree program will integrate aspects of graduate level training from many different units on campus as well as from the program's partner institutions distributed across the greater Phoenix area. Partner institutions will include, but are not be limited to The Barrow Neurological Institute (BNI), Translational Genomics Research Institute (TGen), University of Arizona College of Medicine, the Mayo Clinic and Sun Health.
The program requires the completion of 84 credit hours of which 12 hours, and only 12, are dissertation credits. At least 18 credits of formal course work are required. In consultation with their committee and their supervisor/mentor, students will be able to customize their program of study to suit their particular interests and goals. Each student completes six credit hours of the core course credits. The core course sequence must be completed before the oral and written evaluation examinations are taken. Additional credits will be comprised of specialized disciplinary courses or research credits chosen in consultation with their mentor and advisory committee.

A one-credit-hour journal club seminar will be required each semester.
Advancement to candidacy will be dependent on successfully passing a formal comprehensive examination that includes both a written proposal of the dissertation research and an oral examination in the broader areas that pertain to that research study. When the research is completed, the dissertation must be written and presented in a public seminar and successfully defended before the supervisory committee.

Admission Requirements: The graduate committee will be responsible for decisions concerning potential recruitment of students and admission recommendation of students to the program.
They will also be highly active in the recruitment procedure each year.
Requirements
A bachelor's degree in science or engineering from a regionally accredited institution (or equivalent degree) is required.

- An official ASU Graduate College application.
- A statement of career and educational goals.
- Identify at least three neuroscience faculty in area of interest.
- Official GRE scores.
- Official transcripts of all undergraduate and graduate course work.
- Three letters of recommendation (two of which should be academic recommendations).

Regular admission may be granted to applicants who have achieved a GPA of 3.00 ( 4.00 scale) or better in the last two years of work leading to a bachelor's degree and who are competitive in the applicant pool as evidenced by GRE verbal, quantitative and analytical scores, the statement of educational/career goals and the letters of recommendation. Particular attention will be paid to research experience and overall preparation in problem solving abilities as evidenced by previous course work, research experiences and/or GRE scores.
Because this program draws on an extremely broad range of disciplinary backgrounds in recruiting students, there is no specific set of undergraduate course requirements other than those implied by the degree requirements described above. Most students will be expected to have had course work in biology, chemistry and math, or demonstrated ability through a subject test GRE. During the first semester, student progress in the core course will be closely monitored for difficulty in specific areas.

## Contact Information:

## Graduate College

http://neuroscience.asu.edu/index.html
LSC 226
beverly.mcbride@asu.edu
480-965-2719

## Statistics (certificate), CERT (GCSTATCE)

Online Degree Search Title: Statistics (Grad Certificate)
Campus: ONLNE, TEMPE
Program Description: The Committee on Statistics offers a program leading to the certificate in statistics. The program is interdisciplinary in that it draws upon faculty research and teaching interests from various academic units so that programs of study can be tailored to reflect individual needs and goals. The committee, which sets program requirements and supervises programs of study, is composed of faculty from departments in the Ira A. Fulton Schools of Engineering, the College of Liberal Arts and Sciences, the W. P. Carey School of Business and the New College of Interdisciplinary Arts and Sciences.
The certificate seeks to provide statistical training for graduate students at ASU and professionals in the metro Phoenix area. It is administered by the Committee on Statistics, which also administers the M.S. in statistics through the Graduate College.

Degree Requirements: 15 credit hours
To qualify for the certificate, a student must complete courses in applied regression analysis (IEE 578, ECN 525 or STP 530) and analysis of variance/experimental design (IEE 572, ECN 530 or STP 531). The remaining nine credits are taken from the set of courses approved by the committee on statistics. The certificate program requires no applied project. A maximum of nine hours from the approved list of certificate courses can be transferred to the M.S. in statistics. Students must have a GPA of at least 3.00 in the courses which apply to the certificate.
Certificate students interested in industrial statistics may choose to emphasize this area of study. The certificate in statistics with emphasis in industrial statistics and six sigma methodology requires the following courses:

- Applied regression analysis (IEE 578, ECN 525 or STP 530).
- IEE 572 Design of Experiments.
- IEE 570 Advanced Quality Control.
- IEE 581 Six Sigma Methodology.
- IEE 585 Six Sigma Capstone.

Course work for the certificate in statistics with emphasis in industrial statistics may be applied to the six sigma black belt certification program offered by the Center for Professional Development.

Admission Requirements: All applicants to the statistics certificate program must submit the Graduate College's online application. The applicant must have a bachelor's degree, and should have completed the following courses (equivalents at ASU are given in parentheses):

- Introductory applied statistics (ECN 221, STP 226 or STP 420).
- One semester of calculus (MAT 210, 265 or 270).

The applicant is also required to have some computer literacy with knowledge of a programming language, a spreadsheet program or a statistical software program.

## Contact Information:

Graduate College
School of Mathematical and Statistical Sciences
http://graduate.asu.edu/statistics/certificate
BYENG 315
Statistics_certificate@asu.edu
480-965-2671

## Journalism and Mass Communication, Walter Cronkite School of Journalism and Mass Communication, PHD (CSJMCPHD)

Online Degree Search Title: Journalism and Mass Communication PHD
Campus: DTPHX
Program Description: This program is designed to be a small, student-centered, scholarly, research-oriented Ph.D. in journalism and mass communication. It is based on the following priorities:

- A journalism and mass communication focus that especially considers the postmodern mediascape.
- An interdisciplinary approach that requires course work outside of the Journalism school.
- One-on-one, faculty-student mentoring.
- Program flexibility.

The emphasis of this degree is the creation of scholarly, peer-reviewed, juried presentations in addition to a scholarly dissertation, which caps the student's program of study. It is a degree based in journalism and mass communication philosophy, theory, a variety of scientific methodologies and critical thinking. The proposed program will prepare students for research-oriented careers in journalism and mass communication education and related fields.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
Students entering the program with a master's degree in journalism or mass communication, or a related field, must complete 60 credit hours of course work. Students who are admitted to the program without a master's degree will be required to complete an additional 24 credits of course work.

- Core courses (18).
- Dissertation (12).
- Elective courses (18).
- Previous master's degree or additional hours approved by the supervisory committee (24).
- Research (12).
- Total credit hours required is 84 .

Admission Requirements: Applicants must have at least a bachelor's degree in journalism or mass communication or a related field, such as communication or media. Applicants must complete the Graduate College online application and will normally have achieved a minimum of a 3.00 GPA in their last 60 credit hours of course work in their first bachelor's degree program.

Journalism, Walter Cronkite School of
Walter Cronkite School of Journalism \& Mass Comm
http://cronkite.asu.edu/grad/index.php
CRONK 302B
masscomm@asu.edu
602-496-6612

## Mass Communication, MMC (CSMCOMMMC) <br> Online Degree Search Title: Master of Mass Communication (MMC) <br> Campus: DTPHX, TEMPE

Program Description: The M.M.C. program offers basic journalism skills instruction, education in journalism values and instills 21stcentury vision and perspective. Students gain practical hands-on experience in specialties including print, broadcast, strategic media and online journalism.
The cornerstones of the graduate program are the Journalism school's specialized experiences:

- Cronkite News Service.
- The Knight Center for Digital Media Entrepreneurship.
- NewsWatch.
- New Media Innovation Lab.
- Projects covering the borderland with Mexico.
- Strategic media experience.

Degree Requirements: 30 credit hours including a Capstone (MCO 570) or 30 credit hours including the required course (MCO 593) and an Applied Project or 36 credit hours including a Capstone(MCO 570)

The master's program is a full-time, three-semester-long, 36-credit-hour immersion program. Students with extensive professional experience may be offered the opportunity to pursue the 30 -credit-hour, mid-career option.

Admission Requirements: Admission is granted for the fall semester only. The application deadline is Feb. 1. Applicants must meet all deadlines and application requirements to be considered. The Cronkite school's graduate committee reviews complete and on time applications. Recommendations for admission are made to ASU's Graduate College, where the final admission decisions are made.
Applicants must submit:

- A Graduate College online application.
- ASU's Graduate College requires that all those admitted have at least a 3.00 GPA (based on a 4.00 scale) in the last 60 credit hours or 90 quarter hours of undergraduate course work.
- The scores on the quantitative and verbal sections of the GRE of those admitted average about 1213 , with the verbal score being particularly important to the Journalism school's graduate committee.
- Test of English as a Foreign Language (TOEFL) scores must be at least 600 for the paper-based examination and 100, Internetbased.
- Three letters of recommendation.
- A personal statement of interest (350-500 words in length).
- A resume.


## Contact Information:

Journalism, Walter Cronkite School of
Walter Cronkite School of Journalism \& Mass Comm
http://cronkite.asu.edu/grad/index.php
CRONK 302
masscomm@asu.edu
602-496-5555
Law, Sandra Day O'Connor College of
Biotechnology and Genomics, LL.M. (LWGENOMLLM)
Online Degree Search Title: Law - Biotechnology \& Genomics (LLM)
Campus:

Program Description: The LL.M. in biotechnology and genomics program is offered through the Sandra Day O'Connor College of Law's Center for Law, Science, and Innovation, the nation's oldest, largest and most comprehensive research center focusing on the intersection of law and science. Through classroom instruction and guided independent study, LL.M. candidates will examine the legal issues surrounding genetic applications such as:

- Cloning.
- Forensic evidence.
- Gene testing.
- Gene therapy.
- Genetically modified organisms.
- Stem cells and behavioral genetics.

The issues relate to:

- Business planning.
- Confidentiality.
- Evidentiary standards.
- Intellectual property.
- International trade.
- Liability.
- Licensing.
- Privacy.
- Regulation.

LL.M. students explore and examine the law that enables and constrains the development, control, and application of biotechnology and genomics. Relevant legal fields include:

- Agricultural law and policy.
- Health law, particularly public health law.
- Intellectual property.

Forensic science and ethical constraints upon the various contemplated uses are also important elements of the program. Because the legal, ethical and policy aspects of genomics and biotechnology are of global significance, this program will also be beneficial for non-U.S. lawyers. Candidates for an LL.M. degree must have received their J.D. or comparable terminal law degree from another country.

Degree Requirements: The program is designed to be completed in nine months on a full-time basis, but may also be pursued on a part-time basis. A degree candidate must complete 24 credit hours of course work to obtain the LL.M. in biotechnology and genomics. A candidate may elect to write a graduate thesis for either three or six credit hours, or can instead elect not to write a thesis and fulfill the equivalent credits with other course work. Two courses are required, 1) genetics and the law, and 2) biotechnology: science, law and policy.
The remaining credit hours will generally be obtained from the list of elective courses. With faculty advisor approval, a candidate may satisfy up to six credit hours with courses offered by other ASU departments or by law courses that are not included on the approved elective list.

Admission Requirements: Applications are accepted on a rolling basis for fall or spring entry.

## Priority deadlines

- Spring entry: Nov. 1.
- Fall entry: May 1.

Admission to the LL.M. program is competitive. In order to be admitted to the LL.M. program, an applicant must have completed a J.D. degree or a law degree at a foreign institution that would qualify the applicant to practice law or pursue license to practice in that country and have submitted a complete application to the program. Selection will be based on:

- Academic background and potential.
- Career experience and ambitions.
- Diversity of experience and background.
- Space and resource limitations in the law school
- Strength of experience related to the program sought and other factors.

For an application to be considered complete, it must include the following:

- The completed LL.M. application form.
- Explanations for affirmative answers to any conduct questions.
- The required application fee.
- A resume that does not exceed three typed pages.
- A statement of interest that does not exceed 1,250 words: double-spaced, typed pages.
- Transcripts from all institutions attended, including the transcript showing that the bachelor's degree and law degree were conferred.
- Two letters of recommendation.
- A writing sample.


## Contact Information:

Law, Sandra Day O'Connor College of
Sandra Day O'Connor College of Law
http://www.law.asu.edu
LAW
Ilm-mls.admissionsl@asu.edu
480-965-1474

## Indian Law (certificate), CERT (LWLAWGRCI)

Online Degree Search Title: Indian Law Certificate
Campus: TEMPE

Program Description: The Indian law certificate program is designed for students who plan to practice Indian law, particularly students who may be representing tribal communities directly after graduation. To be eligible to pursue the Indian law certificate a student must be enrolled in the Sandra Day O'Connor College of Law and be in good standing. The certificate requires substantive course work, a minimum grade requirement, practice experience in Indian law and a substantial paper written on an Indian law topic. Transfer applicants may be admitted to the certificate program if they otherwise meet the admissions standards of the Sandra Day O'Connor College of Law.

Degree Requirements: The certificate requires a minimum of 21 hours of substantive work in Indian law and related fields. The following courses are required:

- Advanced legal research and writing.
- At least one other course approved by the executive director, that primarily addresses core Indian law issues.
- Federal Indian Law I.
- Federal Indian Law II.
- Indian law seminar.

Other credits must come from a list of approved law electives or non-law electives approved by the executive director. Students pursuing the certificate must also complete a practice experience in Indian law (the Indian law clinic or other executive director approved experience) and the senior thesis requirement. Students must receive a grade of " 75 " or above, " C " (2.00) or above, or a "pass," in each course used to fulfill the Indian law certificate requirements.
More specific requirements for completion of the Indian Law Certificate can be found on the College of Law website.
Admission Requirements: Students wishing to pursue the Indian law certificate must be enrolled in the J.D. program at the Sandra Day O'Connor College of Law and must be in good standing. Specific requirements for the Indian law certificate program can be found on the college website.

## Contact Information:

Law, Sandra Day O'Connor College of
Sandra Day O'Connor College of Law
http://www.law.asu.edu/
LAW
kathlene.rosier@asu.edu
480-965-6204
Juris Doctor of Law, JD (LWJDJD)
Online Degree Search Title: Juris Doctor (JD)
Campus:

Program Description: The Sandra Day O'Connor College of Law at Arizona State University enrolls only one first-year, Juris Doctor class per year, and it enters in the fall semester. The Juris Doctor degree is a three year program, and almost all students study on a full-time basis. The college does offer a flexible scheduling option for students with circumstances that make full-time enrollment impossible. The college enrolls a new entering class of approximately 200 students each fall semester.
The program offers a particularly large selection of courses with many options for interdisciplinary study with other departments on campus. Students will find the opportunity to take classes with a more traditional, theoretical focus and to take advantage of many options that focus on the development of practice skills. The college hosts:

- The Center for Law and Global Affairs.
- The Center for Law, Science and Innovation.
- The Diane Halle Center for Family Justice.
- The Indian Legal Program.

Degree Requirements: Satisfactory completion of the course of study offered by Law leads to the Juris Doctor degree. To be eligible for the J.D., a student must satisfy all the following:

- Admission to the college as a candidate for the degree and satisfaction of any conditions imposed at the time of admission or prior to graduation during the course of law study.
- All 89 credits required for graduation must be earned at the ASU Sandra Day O'Connor College of Law unless prior approval by the dean's designee is granted (per college policies).
- A maximum of 12 credits of externship work and a maximum of seven credits of independent study can be counted towards the 89 credits required for graduation.
- Completion of all required first-year courses, professional responsibility, and either constitutional law II or criminal procedure.
- Completion of the degree requirements no earlier than 24 months and no later than 84 months after commencing study at the law school or a law school from which the school has accepted transfer credit. A transfer student must complete the work of at least three semesters in the ASU Sandra Day O'Connor College of Law immediately preceding the granting of a degree.
- No more than four credit hours of "D" (1.00 on a 4.00 scale) gradework after the first year can be applied toward the 89 hours.
- Satisfaction of the graduation writing requirement (per college policies).
- Satisfaction of the professional skills requirement (per college policies).
- Satisfaction of the seminar writing requirement (per college policies).
- Successful completion of a minimum of 89 hours of academic credit of which 76 must be graded with a cumulative weighted average of " $C$ " ( 2.00 on a 4.00 scale) or better.

Admission Requirements: The Sandra Day O'Connor College of Law at Arizona State University enrolls only one first-year, J.D. class per year, and it enters in the fall semester. The program is a three-year program, and almost all students study on a full-time basis. The college does offer a flexible scheduling option for students with circumstances that make full-time enrollment impossible. Each year, far more applications are submitted to the Sandra Day O'Connor College of Law than the college's facilities and programs can accommodate. Thus, admission is competitive. Law makes its admissions decisions based upon all information contained in the applicant's file.
To be considered for admission to the J.D. program, an applicant must 1) have taken the LSAT, and 2) have earned, or expect to earn by the time of enrollment in law school, a bachelor's degree from an accredited, four-year college or university. Further, a candidate must complete the application for admission and submit all mandatory attachments. Transcripts and letters of recommendation or evaluations must be submitted through the Law School Admissions Council's Credential Assembly Service (CAS) and will be provided to the College of Law by LSAC with the applicant's LSAT record. Applicants are encouraged to apply electronically through http://www.lsac.org.
The Sandra Day O'Connor College of Law will provide full file review to 100 percent of the completed applications to the J.D. program. While the applicant's undergraduate record and LSAT score are important predictors, no decision will be made on objective criteria alone. Among the other factors considered by the admissions committee are:

- Ability to communicate.
- Demonstrated commitment to public service.
- Diversity of experience and background.
- Exceptional personal talents.
- Extracurricular or community activities.
- Foreign language proficiency.
- Geographic diversity.
- Graduate study.
- History of overcoming economic or other disadvantage.
- Honors and awards.
- Leadership experience.
- Maturity.
- Overcoming disability.
- Personal experiences with discrimination.
- Publications.
- Service in the Armed Forces.
- The rigor of the undergraduate course of study.
- Work experience.

Application deadlines are as follows:

- Early admission (non-binding): Nov. 1.
- Regular admission: Feb. 1.

For an application to be considered complete, it must include the following:

- A complete Credential Assembly Service (CAS) report with all transcripts and letters of recommendation or evaluations. The CAS report must be from the current application year.
- The completed application form.
- Explanations for affirmative answers to any conduct questions.
- Law School Admissions Test (LSAT) score(s) from LSAC.
- A personal statement that does not exceed two double-spaced, typed pages.
- The required application fee.
- A resume that does not exceed three typed pages.


## Contact Information:

Law, Sandra Day O'Connor College of
Sandra Day O'Connor College of Law
http://www.law.asu.edu
LAW
law.admissions@asu.edu
480-965-1474
Law, Science, \& Technology (certificate), CERT (LWLAWSTCE)
Online Degree Search Title: Law, Science, and Technology Certificate
Campus: TEMPE
Program Description: The law, science and technology certificate program is for students with science and technology interests and is limited to students pursuing a J.D. at the Sandra Day O'Connor College of Law.
The program allows for specializations in the areas of:

- Environmental law.
- Genomics and biotechnology law.
- Health law.
- Intellectual property.
- Law and psychology.

Degree Requirements: Program requirements for the law, science and technology certificate include the following:

- Each student is encouraged to actively participate in the events (speaker, conferences, symposia) sponsored by the Center for Law, Science and Innovation and to participate in at least one approved activity for two semesters.
- Each student must satisfy their graduation writing requirement on a topic related to law, science and technology. The paper must meet all of Sandra Day O' Connor College of Law's requirements for a graduation writing requirement and must be supervised by a center fellow.
- A minimum cumulative grade average of at least 83 is required for those courses that satisfy the substantive course work requirements of the certificate. Courses used to satisfy the core or specialization requirements may not be taken for pass/fail credit. A student may take one elective course on a pass/fail basis.
- Students have the option of pursuing a specialization within the certificate. The specialization areas are intellectual property, health law, environmental law, genomics and biotechnology law, and law and psychology. For students pursuing the specialization option, four courses within the area of specialization are required and the core course requirement is reduced from two to one.
- Substantive course work in law, science and technology subjects for a minimum of seven courses, earning at least 16 credit hours, at the Sandra Day O' Connor College of Law. Two courses are chosen from the designated core courses and five courses are chosen from a list of elective courses.

Additional details of the program requirements for the law, science and technology certificate can be found in the Sandra Day O' Connor College Statement of Student Policies.

Admission Requirements: Students wishing to pursue the law, science and technology certificate must be enrolled in the J.D. program at the Sandra Day O'Connor College of Law and be in good standing.
Specific requirements for admission to the law, science and technology certificate program can be found on the college website.

## Contact Information:

Law, Sandra Day O'Connor College of
Sandra Day O'Connor College of Law
http://law.asu.edu/
LAW
andrew.askland@asu.edu
480-965-2465
Laws, LL.M. (LAWLAWSLLM)
Online Degree Search Title: Laws (LLM) Campus:

Program Description: The Master of Laws (LL.M.) program allows one year of post-Juris Doctor (J.D.) study tailored to the scholarly and practice interests of participating students. Concentrations are available in a variety of areas in which the law school holds particular strength. Alternatively, U.S. attorneys and international attorneys may design their own customized LL.M. to complement their practice interests.

Degree Requirements: The LL.M. program requires a total of 24 credit hours. Required courses will depend on the student's particular concentration of the LL.M. International students will be required to take U.S. law and legal analysis (two credits) and professional legal writing (two credits). A candidate may elect to write a graduate thesis for either three or six credit hours, or can instead elect not to write a thesis and fulfill the equivalent credits with other course work. The remaining credit hours will generally be obtained from the list of elective courses. With faculty advisor approval, a candidate may satisfy up to six credit hours with courses offered by other ASU departments or by law courses that are not included on the approved elective list.

Admission Requirements: The Sandra Day O'Connor College of Law offers several LL.M. programs for students who have already completed a law degree within the U.S. or abroad. Applications are accepted on a rolling basis for fall or spring entry. Foreign applicants are encouraged to apply by March 15, due to visa considerations.
Priority Deadlines

- Spring entry: Nov. 1
- Fall entry: May 1

Admission to the LL.M. program is competitive. To be admitted to the LL.M. program, an applicant must have completed a J.D. or a law degree at a foreign institution that would qualify the applicant to practice law or pursue license to practice in that country, and have submitted a complete application to the program. Selection will be based on academic background and potential, diversity of experience and background, career experience and ambitions, strength of experience related to the program sought, space and resource limitations in the law school, and other factors.
For an application to be considered complete, it must include the following:

- The required application fee.
- A personal statement that does not exceed three double-spaced, typed pages.
- A resume that does not exceed three typed pages.
- A writing sample.
- Explanations to affirmative answers to any conduct questions.
- The completed LL.M. application form.
- Transcripts from all institutions attended, including the transcript showing that the bachelor's degree and law degree were conferred.
- Two letters of recommendation.

Applicants with degrees from foreign institutions must, 1) submit transcripts to World Education Services (WES) (www.wes.org), and 2) meet ASU Graduate College and Sandra Day O'Connor College of Law English proficiency requirements.

## Contact Information:

Law, Sandra Day O'Connor College of
Sandra Day O'Connor College of Law
http://law.asu.edu/Ilm
LAW 101
llm-mls.admissions@asu.edu
480-965-1474

Laws (US Law and Global Legal Practice), LL.M. (LAWLGLPLLM)
Online Degree Search Title: Laws - US Law and Global Legal Practice (LLM)
Campus:

Program Description: The Master of Laws (LL.M.) program allows one year of post-Juris Doctor (J.D.) study tailored to the scholarly and practice interests of participating students. Concentrations are in a variety of areas in which the law school holds particular strength. The concentration in U. S. law and global legal practice is designed in coordination with the College of Law's Center for Law and Global Affairs. The LL.M. in U.S. law and global legal practice draws on the unique focus of the center and our faculty's wide range of international and transnational legal expertise in global health, the environment, human rights, trade and emerging technologies. The program emphasizes interdisciplinary study and links rigorous legal training with the research and scholarship drawn from political science, policy studies, anthropology and sustainability. Students in this program will have the opportunity to practice empirical research and work on center research initiatives in public-private governance, global health, human rights indicators, transitional justice and human trafficking.

Degree Requirements: The LL.M. in U.S. law and global legal practice is designed to be completed in one academic year (nine months) on a full-time basis, but may also be pursued on a part-time basis. A degree candidate must complete 24 credit hours of course work to obtain the LL.M. A candidate may elect to write a graduate thesis for either three or six credit hours, or can instead elect not to write a thesis and fulfill the equivalent credits with other course work. Required course work includes two of the following courses:

- International business transactions.
- International human rights law
- International institutions and global governance.
- Public international law.

The remaining credit hours will generally be obtained from the list of elective courses. With faculty advisor approval, a candidate may satisfy up to six credit hours with courses offered by other ASU departments or by law courses that are not included on the approved elective list.

Admission Requirements: The Sandra Day O'Connor College of Law offers several LL.M. programs for students who have already completed a law degree within the U.S. or abroad. Applications are accepted on a rolling basis for fall or spring entry. Foreign applicants are encouraged to apply by March 15, due to visa considerations.
Priority Deadlines

- Spring entry: Nov. 1
- Fall entry: May 1

Admission to the LL.M. program is competitive. To be admitted to the LL.M. program, an applicant must have completed a J.D. or a law degree at a foreign institution that would qualify the applicant to practice law or pursue license to practice in that country and have submitted a complete application to the program. Selection will be based on academic background and potential, diversity of experience and background, career experience and ambitions, strength of experience related to the program sought, space and resource limitations in the law school, and other factors.
For an application to be considered complete, it must include the following:

- The required application fee.
- A personal statement that does not exceed three, double-spaced, typed pages.
- A resume that does not exceed three typed pages.
- A writing sample.
- Explanations to affirmative answers to any conduct questions.
- The completed LL.M. application form.
- Transcripts from all institutions attended, including the transcript showing that the bachelor's degree and law degree were conferred.
- Two letters of recommendation.

Applicants with degrees from foreign institutions must 1) submit transcripts to World Education Services (WES) (www.wes.org), and 2) meet ASU Graduate College and Sandra Day O'Connor College of Law English proficiency requirements.

## Contact Information:

Law, Sandra Day O'Connor College of
Sandra Day O'Connor College of Law
http://law.asu.edu/llm
LAW 101
Ilm-mls.admissions@asu.edu
480-965-1474

## Legal Studies, MLS (LWLGSMLEGS)

Online Degree Search Title: Law - Legal Studies (MLS)
Campus: TEMPE
Program Description: The Master of Legal Studies is a unique, 30 -credit-hour graduate program offered to established professionals or academicians whose work intersects with the law, but who do not want to become an attorney. M.L.S. students learn the foundations of U.S. law and study the process of legal analysis in the context of the cases, laws, and regulations related to their specific career interests. With approximately 10 credits of required course work, M.L.S. students choose the remaining 20 credits of electives to customize their studies to the area of law relevant to their current career.
Note: Pursuant to American Bar Association (ABA) standards, no law credits completed prior to admission to a J.D. program, including credits earned in the M.L.S. program, may be transferred to a future J.D. program under any circumstances.

Degree Requirements: The program consists of 30 credit hours of approved study.
The degree can be completed on a full-time or part-time basis.
M.L.S. students are required to take U.S. Law and Legal Analysis (2 credit hours) and Professional Legal Writing (2 credit hours).

Students are required to choose at least two of the following basic foundational courses:

- Contracts (4).
- Constitutional Law (3).
- Criminal Law (3).
- Property (3).
- Torts (4).

The remainder of the credits are electives. Elective course selection will be flexible to accommodate the diversity of intellectual and professional interests the program is intended to serve.

Admission Requirements: The Sandra Day O'Connor College of Law offers the M.L.S. program for students who do not wish to practice law but believe that some education in the law would be beneficial to their advancement in their careers in other fields. Priority deadlines

- Spring entry: Nov. 1.
- Fall entry: May 1.

Admission to the M.L.S. program is competitive. In order to be admitted to the M.L.S. program, an applicant must have completed a bachelor's degree from an accredited four-year college or university in the United States or attained a comparable degree from a foreign institution and have submitted a complete application to the program. Selection will be based on a variety of factors including academic background and potential, diversity of experience and background, career experience and ambitions, space and resource limitations in the law school, and other factors.
For an application to be considered complete, it must include the following:

- The completed M.L.S. application form.
- Explanations for affirmative answers to any conduct questions.
- The required application fee.
- A resume that does not exceed three typed pages.
- A statement of interest that does not exceed 1,250 words: double-spaced, typed pages.
- Transcripts from all institutions attended, including the transcript showing that the bachelor's degree was conferred.
- Two letters of recommendation.
- A writing sample.


## Contact Information:

Law, Sandra Day O'Connor College of
Sandra Day O'Connor College of Law
http://www.law.asu.edu/
LAW
llm-mls.admissionsl@asu.edu
480-965-1474

## Tribal Policy, Law and Government, LL.M. (LWTBLMLAWS) <br> Online Degree Search Title: Law - Tribal Policy, Law, and Government (LLM) <br> Campus:

Program Description: The LL.M. in tribal policy, law and government is designed for lawyers and law school graduates who desire to work on issues related to tribal law and federal Indian law at the professional and academic levels. The Indian Legal Program is nationally known and was established in 1988. The Sandra Day O'Connor College of Law is a leading institution in producing graduates specializing in Indian law.
The LL.M. program provides students with a detailed understanding of the nature of tribal government, law and policy development within the domestic federal structure. Candidates will benefit from the extensive resources committed to the Indian legal program, including a full-time director and staff and an Indian law clinic with its own full-time director and staff.
The core curricular offerings focus on domestic tribal law, federal Indian law, and American institutions of law and government. The program explores the expression of domestic law within contemporary administrative, governmental and judicial institutions. ASU is located in the heart of the Southwestern U.S., home to roughly one-third of the native population in the U.S. and where many of the largest Indian nations in the country reside. It is the academic home for several nationally known scholars who do research on American Indian issues, and houses many unique resources for such scholarship, including the Labriola Collection at Hayden Library.

Degree Requirements: The program is administered by the Indian legal program.
The LL.M. Practicum Track
The LL.M. practicum track is oriented toward students who seek practical experience in tribal law and federal Indian law. It provides intensive instruction to students who graduated from a law school that had few or no courses in Indian law and who now seek to practice in these areas at a professional level. This track requires a minimum of 24 credit hours of study. A thesis is not required. Students will immerse themselves in the study of tribal law and federal Indian law and will apply the knowledge and experience they gain through the practical component of the degree program which may consist of:

- Research projects for tribal courts and governments.
- State, tribal and federal court practice.
- Tribal code drafting.

Graduates will be well equipped for professional positions that require knowledge and expertise in tribal law and federal Indian law. Students on the practicum track will have the option of pursuing the degree on a part-time basis.

Admission Requirements: Applications are accepted on a rolling basis for fall or spring entry.

## Priority Deadlines

- Spring entry: Nov. 1.
- Fall entry: May 1.

Admission to the LL.M. program is competitive. In order to be admitted to the LL.M. program, an applicant must have 1) completed a J.D. degree or a law degree at a foreign institution that would qualify the applicant to practice law or pursue license to practice in that country, and 2) have submitted a complete application to the program. Selection will be based on:

- Academic background and potential.
- Career experience and ambitions.
- Diversity of experience and background.
- Space and resource limitations in the law school.
- Strength of experience related to the program sought, and other factors.

For an application to be considered complete, it must include the following:

- The completed LL.M. application form.
- Explanations for affirmative answers to any conduct questions.
- The required application fee.
- A resume that does not exceed three typed pages.
- A statement of interest that does not exceed 1250 words: double-spaced, typed pages.
- Transcripts from all institutions attended, including the transcript showing that the bachelor's degree and law degree were conferred.
- Two letters of recommendation.
- A writing sample.


## Contact Information:

Law, Sandra Day O'Connor College of
Sandra Day O'Connor College of Law
http://www.law.asu.edu/
LAW
Ilm-mls.admissions@asu.edu
480-965-1474

Letters and Sciences, School of
Applied Ethics and the Professions (Science, Technology and Ethics), MA (LAAEPSEEMA)
Online Degree Search Title: Applied Ethics (Science,Tech, and Ethics) MA
Campus: DTPHX, TEMPE
Program Description: The science, technology and ethics concentration of the applied ethics and the professions degree focuses on the ethical issues arising from the multiple challenges involved in balancing economic, technological, environmental, social and cultural development in a world increasingly affected by science and technology. It provides the student with a general background in ethics and ethical systems with an emphasis on ethical issues in science and technology, as well as exposing students to new challenges posed by rapidly evolving sociotechnical systems in such areas as:

- Energy, environment and development.
- Genetic engineering and biotechnology.
- Information and communication technology.
- Nanotechnology.
- Risk assessment.
- Technology and security.

Degree Requirements: 30 credit hours including the required course (AEP 593) and an Applied Project
Course work is distributed as follows:

- AEP 593 Required capstone course (6).
- Elective concentration courses (15).
- Required concentration course (3).
- Required core courses (6).

Admission Requirements: All applicants must meet all Graduate College admission criteria, and submit the following:

- The Graduate College online application.
- Official transcripts from all postsecondary institutions attended.
- Statement of interest in applied ethics and career goals.
- Three letters of recommendation.


## Contact Information:

Letters and Sciences, School of
School of Letters and Sciences
http://lincolncenter.asu.edu/students_MADegree
SANCA 250D
joseph.herkert@asu.edu
480-727-1548
Behavioral Health, DBH (LSBEVHEDBH)
Online Degree Search Title: Behavioral Health DBH
Campus: DTPHX

Program Description: The D.B.H. is a new degree to prepare behavioral clinicians to provide integrated behavioral care in primary care and other medical settings. The D.B.H. is an upgrade for master's-level clinicians who are interested in working at a doctoral level in primary care. Primary care patients can have untreated behavioral conditions that can result in poor clinical outcomes and increased medical costs related to overuse of medical services. Behavioral interventions in primary care have demonstrated improved clinical outcomes and decreased medical costs. A key recommendation in health care reform is improved integration of medical and behavioral care. Traditional doctoral training does not prepare clinicians with the interdisciplinary knowledge required in integrated care. Programs continue to graduate clinicians into private-practice settings not aligned with medical providers. The D.B.H. program reflects a paradigm shift to a curriculum based on:

- Business entrepreneurship skills, such as writing a business plan, marketing and return on investment specific to health care.
- Evidence-based behavioral interventions for primary care that are efficient and contribute to cost savings by reducing unnecessary medical care services and costs.
- Health care systems, policy, economics and finance, to respond to emerging opportunities in health care reform.
- Medical literacy, to understand common medical conditions seen in primary care and consult effectively with the medical team.

The D.B.H. curriculum is unique in that it:

- Incorporates practicum experience in primary care settings.
- Integrates clinical and professional affiliated faculty as well as faculty associates who are experts and are directly employed in health care environments in the area that they are teaching.
- Is a cohort-based, accelerated program that enables students already holding a clinical master's degree to complete the D.B.H. in 18 months (part-time enrollment is also available).
- Is available via a traditional residential program or via a distance-learning program.
- Replaces the dissertation with a clinically focused culminating research project.

Focused clinical practicum experiences are arranged with preceptors and administrators in the student's local health care setting. Rural health and experiences with disadvantaged and multicultural populations are encouraged. Graduates of the D.B.H. program will contribute to a societal transformation by leading to improved access to behavioral care, integration of a behavioral provider on the medical team, improved patient outcome and satisfaction, and decreased cost of care.

Degree Requirements: 84 credit hours including the required course (IBC 793) and an Applied Project

- Core course requirements (33).
- Elective courses (9-12).
- Practicum and culminating experience (9-12).
- Previously awarded master's degree or other courses approved by the supervisory committee (30).

Admission Requirements: All applicants must 1) submit a Graduate College application, and 2) possess a bachelor's degree and a master's degree from a regionally accredited postsecondary institution in the U.S., or an equivalent degree from a recognized international postsecondary institution.
Applicants must have a minimum of a 3.00 GPA calculated on the last 60 credit hours of their first bachelor's degree.
All applicants from countries whose native language is not English must meet university and degree program English proficiency requirements.

## Contact Information:

Letters and Sciences, School of
School of Letters \& Sciences
http://www.dbh.asu.edu/
NHI 1
dbh@asu.edu
602-496-1354

## Counseling, MC (EDCOUNMC)

Online Degree Search Title: Counseling (MC) Campus: TEMPE

Program Description: The mission of the M.C. program is to prepare students to become professional mental health counselors or school counselors, culturally competent to work with diverse clientele in a variety of mental health settings in Arizona and other states. Clinical mental health counselors seek to prevent or treat psychological problems and to promote the health of individuals, families, groups and organizations in a multicultural and diverse society. The M.C. program was designed according to the standards
for clinical mental health and school counseling set by the Council for the Accreditation of Counseling and Related Educational Programs.
The faculty has endorsed the multicultural counseling competencies of the American Counseling Association, the guidelines on multicultural education, training, research, practices and organizational change for psychologists, and the guidelines for psychotherapy with lesbian, gay and bisexual clients of the American Psychological Association.

Degree Requirements: 60 credit hours and a Thesis or 60 credit hours and a Written Comprehensive Exam

The program can be completed in no less than two years. Most students can complete the program in two to three years. The program is not designed to be a part-time program.
The practitioner option places considerable emphasis on supervised field experiences. A comprehensive exam is required to complete this option.
The research option places considerable emphasis on developing research competencies, in addition to supervised field experience. Successful completion of a master's thesis is required in this option. The school counseling option provides added training in issues related to counseling in the schools (K-12 education). Considerable emphasis is placed on supervised experience in the schools.

Admission Requirements: Applicants to this program must:

- Submit the Graduate College application.
- Meet the Graduate College requirements for admissions (e.g., minimum 3.00 junior/senior GPA and English language proficiency).
- All applicants are required to take the verbal and quantitative sections of the GRE. The test must be retaken if scores are more than five years old.
- All students must be graduates of accredited higher education institutions.

Nonacademic/Professional/Life Experiences
Applicants are required to submit a three- to five-page personal statement that will include information on significant life experiences, professional experiences, personal attributes, personal and professional goals, and other information that will assist the faculty in evaluating the applicant.
Recommendations
Three recommendation forms are to be submitted. These should be completed by persons able to evaluate the applicant's academic potential, professional experience and personal attributes.
All application materials must be submitted by January 15 to ensure consideration for admission the following fall semester.
For more information visit the school's website.

## Contact Information:

Letters and Sciences, School of
School of Letters and Sciences
http://sls.asu.edu/cp/mc/
EDB 446
ccp@asu.edu
480-965-8733

## Counseling Psychology, PHD (EDCPSYPHD)

Online Degree Search Title: Counseling Psychology (PhD)
Campus: TEMPE
Program Description: The doctoral program in counseling psychology closely adheres to the scientist-practitioner training model in preparing graduates for employment in academic and service delivery settings. Although faculty interests are diverse, there is a common emphasis on empirical data as the basis for professional practice. The faculty has endorsed the multicultural counseling competencies of the American Counseling Association, the guidelines on multicultural education, training, research, practices and organizational change for psychologists, and the guidelines for psychotherapy with lesbian, gay and bisexual clients of the American Psychological Association (APA).
The program is committed to the scientist-practitioner model. One manifestation of that commitment is the three complementary functions of the program's counselor training center, namely service delivery, clinical training, and research. Research foci include:

- At-risk populations.
- Career development.
- Multiculturalism.
- Positive psychology.
- Process/outcome in therapy.
- Supervision.

Degree Requirements: 113 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation
Our doctoral curriculum typically requires three to five years of full-time graduate study, plus a year-long internship in an APAapproved setting. Each of these years involves course work pertaining to theory, research and practices in counseling psychology. Students are expected to maintain full-time status. Full-time status involves being registered for at least nine credits per semester in the course work years. This requirement applies only to the academic year and not summer sessions. At a minimum, students are required to complete two years of course work in residence at ASU.

Admission Requirements: Applicants to doctoral study in counseling psychology must first submit 1) a Graduate College application, and 2) GRE scores (which can be no older than five years). The following supplemental materials are required by the counseling psychology program:

- A brief personal statement ( 600 words or less) describing your history, your academic and professional goals, and your reasons for selecting the counseling psychology program at ASU.
- A completed biographical information form.
- A seven-page sample of your expository writing (e.g., taken from a paper you have prepared for a course or a report on a project you have completed in our field).
- Three letters of recommendation. We prefer that two of these letters be from persons familiar with your academic work.

All application materials must be submitted by December 1 in order to ensure consideration for admission the following fall semester.
For more information, visit the school's website.

## Contact Information:

Letters and Sciences, School of
School of Letters and Sciences
http://sls.asu.edu/cp/phd/
EDB 446
ccp@asu.edu
480-965-8733

## Liberal Arts and Sciences, College of <br> African Studies (certificate), CERT (LAAFRICACE)

Online Degree Search Title: African Studies (Grad Certificate)
Campus: TEMPE
Program Description: The graduate certificate in African and African diaspora studies is an interdisciplinary program with four areas of emphasis:

- Comparative studies.
- African diaspora studies.
- African studies.
- Women and gender in African and African diaspora studies.

These areas of emphases provide students with access to an extensive range of information and systematic knowledge committed to the new model of African and African diaspora studies that focuses on the intersections of race, culture, and gender with interdisciplinary perspectives.
The required course, AFR 500 RM: Theory and Methods, offers students an overview of the focus and explicates relevant methodologies and theories. This required course, along with the courses within the areas of emphasis and the capstone course, complete the certificate. As this certificate program offers students an international dimension to the study of peoples and cultures of African descent, students will invigorate their knowledge about global issues and further expand their research pursuits. This certificate program characterizes the faculty's intellectual and research strengths and the curriculum's interdisciplinary strategies and research approaches that highlight the continuities and disjuncture of history and experiences throughout Africa and the diaspora.

Degree Requirements: 18 credit hours
The certificate program requires:

AFR 500 RM: Theory and Methods (3)
Emphasis courses* (9)
Capstone project (3)
Elective (3)

* Students select one of four emphases.

Admission Requirements: Applicants must submit the Graduate College online application. Admission to the graduate certificate in African and African diaspora studies program is open to any student who has completed a bachelor's degree at an accredited U.S. institution or equivalent. Students who are regularly admitted to a graduate degree program may pursue the certificate in tandem with their degree program. Students who are not regularly admitted to a graduate degree program may still pursue the certificate.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://aaas.clas.asu.edu/
WILSN 140
aframstu@asu.edu
480-965-4399

## American Media and Popular Culture, MAS (LAAMPCMAS)

Online Degree Search Title: American Media and Popular Culture (MAS)
Campus: ONLNE, TEMPE
Program Description: The M.A.S. in American media and popular culture will offer working professionals and international students in the U.S., particularly secondary education teachers interested in film and media studies and media literacy education, an opportunity to earn a graduate-level degree in the aesthetics, history and culture of American media (film, television and the Internet). Arizona high schools are slowly but continually expanding their offerings in film, television and media literacy, and teachers need to continue their education and earn graduate-level degrees to advance in their profession. We also believe the program will attract non-traditional students interested in advancing their knowledge of moving image culture. The program will be offered through distance learning, thereby providing students from around the state and globe with a visually interactive yet flexible learning environment. As such, we believe it will be of particular interest to international students.
Since this is a distance learning program, international students will not be issued any non-immigrant documents, since they will not be eligible to obtain a student visa.

Degree Requirements: 30 Credit Hours including the required course (FMS 593) and an Applied Project The program consists of 12 credit hours of required courses, and 18 credit hours of electives.

Admission Requirements: All applicants must 1) complete the Graduate College online application, and 2) meet all Graduate College admission criteria.
Students from a country whose native language is other than English will be required to meet the Graduate College English proficiency requirement.

## Contact Information:

Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/graduate
LL 542
enggrad@asu.edu
480-965-3168

## Animal Behavior, PHD (LAANBPHD)

Online Degree Search Title: Animal Behavior (PhD)
Campus: TEMPE
Program Description: Animal behavior is a graduate degree program that will provide Ph.D.-level training in mechanistic and functional approaches to understanding behavior in a variety of animal taxa. The study of behavior is at the interface of several scientific disciplines (e.g., physiology, ecology, evolution) and good research in this area requires diverse but specialized training and
skills. This program will unify and coordinate graduate training in an area of real strength in research and education at ASU in the behavioral sciences.
This program will complement the transdisciplinary Ph.D. in neuroscience program that is currently in place at ASU and will have applied scientific value, in areas such as mental and behavioral health in humans and veterinary science. The ecological focus in the program (i.e., behavioral ecology, conservation biology) will feed into Valley, state and global issues in ecosystem and resource sustainability.

Degree Requirements: 84 credit hours a Prospectus and a Dissertation

- Core Requirements (8)
- ANB 635 (4).
- ANB 636 (4).
- Elective Courses (21), the department and the student's advisor will determine these courses in conjunction with the student.
- Research (43)
- Dissertation (12)

Admission Requirements: All applicants will submit the Graduate College online application. The applicant must have a baccalaureate degree from a regionally accredited institution in the U.S. or an international equivalent degree. A minimum GPA of 3.00 ( 4.00 scale) must have been earned in the student's last 60 hours of their bachelor's program. The GRE is required.

All applicants from countries whose native language is other than English must meet English proficiency requirements.

## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://animalbehavior.asu.edu/
LSC 226
SOLS.grad@asu.edu
480-965-1768

## Anthropology, PHD (LAANTHRPHD)

Online Degree Search Title: Anthropology (PhD)
Campus: TEMPE
Program Description: The School of Human Evolution and Social Change (SHESC) is an excellent choice for students wanting to pursue a Ph.D. in the classic fields of anthropology:

- Archaeology.
- Bioarchaeology.
- Physical anthropology.
- Sociocultural anthropology.

It is also an ideal environment for students who want to combine these approaches and other disciplines to explore specific issues or research questions within a transdisciplinary context. Our flexible graduate curricula are designed to encourage students to design innovative plans of study to pursue their interests, while receiving broad training in key areas. The anthropology faculty actively engage with faculty in other disciplines, including:

- Applied mathematics.
- Chemistry.
- Environmental economics.
- Epidemiology.
- Formal modeling.
- Genetics.
- Sociology.
- Sustainability.
- Technology and society.
- Urban planning.

The school offers many exciting hands-on learning opportunities through laboratories and field-based research that focus on addressing real-world challenges related to the following research themes:

- Biological, social, and cultural dimensions of human health.
- Culture, heritage and identity.
- Global dynamics and regional interactions.
- Human origins, evolution and diversity.
- Societies and their natural environments.
- Urban societies

The training students receive in this program prepares them to become expert scholars able to contribute not only to their chosen field, but to finding solutions to humankind's greatest challenges.

Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation
The Ph.D. program consists of:

- A dissertation.
- Eighty-four hours of course work post-bachelor's.
- Fifty-four hours ( 30 course work, 12 research, and 12 dissertation hours) post-master's.
- A written comprehensive examination and the oral defense of a doctoral proposal/prospectus.

Students entering with an M.A. in a related field may be granted up to 30 credit hours toward the 84 hour total required for the Ph.D. Students without an M.A. must earn an additional 30 hours of graduate credit, produce a research portfolio which is formally evaluated by a faculty committee, and present that research in a public forum before continuing on in the later stage of the Ph.D. All students must 1) maintain a "B-" (3.20) average GPA in their courses, and 2) complete degree requirements per the program's satisfactory progress policy.

Admission Requirements: In addition to the general requirements for admission to the Graduate College, SHESC requires applicants to provide:

- A current curriculum vitae or resume.
- Official GRE scores.
- An optional sample of their written work.
- A statement of purpose outlining career and educational goals.
- Three letters of recommendation.
- Transcripts of all undergraduate and graduate course work.

Undergraduate course work in anthropology is not a prerequisite for admission, but is generally advisable. Students may be admitted without such a background and may be required to acquire knowledge of general anthropology in a manner to be specified at the time of admission.

## Contact Information:

Liberal Arts and Sciences, College of School of Human Evolution \& Social Change
http://shesc.asu.edu/graduate_studies
SHESC 233
shescgrad@asu.edu
480-965-6215

## Anthropology (Museum Studies), MA (LAMUSEUMMA)

Online Degree Search Title: Anthropology (Museum Studies) (MA)
Campus: TEMPE

Program Description: The School of Human Evolution and Social Change offers an M.A. in anthropology with a concentration in museum studies. Museum anthropology encompasses theoretically oriented analyses of museums as cultural institutions (including the activities of staff members, visitors, represented peoples and all implicated others), as well as applied aspects of working in museums and related agencies.
Drawing on all subdisciplines of anthropology, special emphasis is placed on connecting material culture and ideation in a variety of institutional and field settings. Museum anthropology students apply museum philosophy, principles, practices and current critiques to explore the many dimensions of curatorship, including:

- Administration.
- Collections management.
- Educational programming.
- Exhibition work.
- Research.

Degree Requirements: 30 credit hours and a Thesis or 30 credit hours and an Applied Project
A minimum of 30 credit hours of graduate work approved by a student's supervisory committee and the Graduate College is required. As a culminating experience, students produce a research portfolio which is formally evaluated by a faculty committee, and present their research in a public forum.

Admission Requirements: All applicants must submit the Graduate College online application.
In addition to the general requirements for admission to the Graduate College, the School of Human Evolution and Social Change requires applicants to provide:

- A current curriculum vitae or resume.
- Official GRE scores.
- An optional sample of their written work.
- A statement of purpose outlining career and educational goals.
- Three letters of recommendation.
- Transcripts of all undergraduate and graduate course work.

Undergraduate course work in anthropology is not a prerequisite for admission, but is generally advisable. Students may be admitted without such a background and may be required to acquire knowledge of general anthropology in a manner to be specified at the time of admission.

## Contact Information:

Liberal Arts and Sciences, College of School of Human Evolution \& Social Change
http://shesc.asu.edu/graduate_studies
SHESC 233
shescgrad@asu.edu
480-965-6215

## Anthropology (Urbanism), PHD (LAURBPHD)

Online Degree Search Title: Anthropology (Urbanism) Phd
Campus: TEMPE

Program Description: Understanding the nature, function and shaping of the human habitat is essential to addressing humankind's greatest challenges. The concentration in urbanism will provide an environment for students to organize varied disciplinary perspectives on urbanism into a collective body of scholarship. The study of classic fields within anthropology will be enriched by grounding them in a comprehensive understanding of the characteristics of urban contexts and the dynamic forces that shape them. Working with faculty from across a range of departments and programs at ASU, doctoral students will be able to capture the creative tensions that scholarship on urbanism has inspired in order to stimulate a provocative, constructive kind of inquiry. Academic units students might engage with to fulfill the requirements of the urbanism concentration include:

- Herberger Institute for Design and the Arts.
- School of Community Resources and Development.
- School of Geographical Sciences and Urban Planning.
- School of Government, Politics and Global Studies.
- School of Historical, Philosophical and Religious Studies.
- School of Human Evolution and Social Change (SHESC).
- School of Sustainability.

SHESC offers many exciting hands-on learning opportunities through laboratories and field-based research that focus on addressing real-world challenges related to the following research themes:

- Biological, social, and cultural dimensions of human health.
- Culture, heritage and identity.
- Global dynamics and regional interactions.
- Human origins, evolution and diversity.
- Societies and their natural environments.
- Urban societies.

The training students receive in this program prepares them to become expert scholars able to contribute not only to their chosen field, but to finding solutions to humankind's greatest challenges.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The Ph.D. program consists of:

- Eighty-four hours of course work post-B.A.
- Fifty-four hours ( 30 course work, 12 research, and 12 dissertation hours) post-M.A.
- A written comprehensive examination and the oral defense of a doctoral proposal/prospectus.
- A dissertation.

Students entering with an M.A. in a related field may be granted up to 30 credit hours toward the 84 hour total required for the Ph.D. Students without an M.A. must earn an additional 30 hours of graduate credit, produce a research portfolio which is formally evaluated by a faculty committee, and present that research in a public forum before continuing on in the later stage of the Ph.D. All students must 1) maintain a "B-" (3.20) average GPA in their courses, and 2 ) complete degree requirements per the program's satisfactory progress policy.
For the concentration in urbanism, 15 credit hours will be selected from an approved list of applicable courses related to urbanism. These courses will include the core urbanism course, GCU 516, as well as one course from each of the four urbanism clusters. These clusters are:

- Built form.
- Culture and society.
- Institutions and governance.
- Natural environment.

Admission Requirements: All applicants must submit a Graduate College online application.
In addition to the general requirements for admission to the Graduate College, SHESC requires applicants to provide:

- A current curriculum vitae or resume.
- Official GRE scores.
- An optional sample of their written work.
- A statement of purpose outlining career and educational goals.
- Three letters of recommendation.
- Transcripts of all undergraduate and graduate course work.

Undergraduate course work in anthropology is not a prerequisite for admission, but is generally advisable. Students may be admitted without such a background and may be required to acquire knowledge of general anthropology in a manner to be specified at the time of admission.

## Contact Information:

Liberal Arts and Sciences, College of School of Human Evolution \& Social Change
http://shesc.asu.edu/PhD_anthropology
SHESC 233
shescgrad@asu.edu
480-965-6215

## Applied Ethics and the Professions (Biomedical and Health Ethics), MA (LAAEPMEMA)

Online Degree Search Title: Applied Ethics (Biomedical and Health Ethics) MA

## Campus: TEMPE

Program Description: Medicine is infused with moral values, and is deeply embedded in a variety of social and cultural contexts, which significantly determine the effectiveness of medical care in achieving healthy outcomes for patients and populations. The objective of the biomedical and health ethics concentration is to integrate academic and clinical dimensions of moral issues in medical practice and biomedical research. Students from a broad range of backgrounds will be exposed to the internal and external logics of medicine, health care and biotechnology, and gain substantive understanding of ethical, cultural and societal issues in a variety of domains. Through course work and other experiences, students will deliberate individually and collectively about a wide range of issues and problems in contemporary medicine and the history of medicine, develop advanced critical normative reasoning and judgment capacities, and cultivate effective communication skills for academic, clinical and policy contexts.

Degree Requirements: 30 credit hours including the required course (AEP 593) and an Applied Project
All students are required to complete graduate course work distributed as follows:

- Required core courses (6).
- Required concentration course (3).
- Elective concentration courses (15).
- Required capstone courses (6).

The two required courses in Foundations of Ethics I and II (AEP 501 and AEP 502) provide the students with the theoretical and historical basis to pursue specialized applied ethics expertise. The concentration course for each concentration introduces the students into basic concepts and practices of their field.
Required for this concentration
BIO 516/AEP 520 Foundations of Bioethics
Electives for this Concentration (15)
AEP 551 Ethical and Spiritual Approaches to Death and Dying
ASB/SSH 501 Ethics, Social Justice, and Health Social Science
ASB 502 Health of Ethnic Minorities
ASB 509 Health: Social and Biocultural Theory
ASB 511 Ethics in Health Social Science Research
BIO 598 Health Systems and Policy
CSS/FMS 494 Race, Medicine and the Body
HSD 591 Ethics and Emerging Technologies
JHR 501 Proseminar in Social Justice and Human Rights
LAW 652 Bioethics and the Law
LAW 617 Genetics and the Law
LAW 791 Neuroscience and the Law
MHI 550 Healthcare Policy and Innovation
NTR 598 Topic: Politics, Ethics, and the American Diet
PHI 591/LAW 791/BIO 591 Research Ethics and Law
REL 598 Medical Ethics: Religious and Secular
WST 598 Gender and Global Health Disparities
WST 691 Women and Health
Other Electives

Graduate seminars in other disciplines may be on topics that are relevant to one or more of the concentrations and may be used as electives for the M.A. in applied ethics and the professions with the approval of the program of one of the concentrations and the approval of the instructor of the seminar.

Admission Requirements: General admission requirements are as follows:

- All documentation must be submitted via the ASU Graduate College online application.
- A "B" (3.00) undergraduate GPA.
- International students: Toefl score or comparable proof of English proficiency.
- Personal statement of interest and qualification.
- Resume.
- Two letters of recommendation.

Note: No GRE is required, except for Eng/Emerging Technology (required unless requirement has been waived by director). For more information on the specifics, please see the ASU Graduate College.
Please also refer to the college of the concentration/track you are interested in for additional details.

## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
DISCVRY 213
sols.grad@asu.edu
480-727-8857

## Applied Linguistics, PHD (EDAPLPHD)

Online Degree Search Title: Applied Linguistics (PHD)
Campus: TEMPE

Program Description: Applied linguistics combines research topics in the linguistic sciences and education to pursue principled approaches to language-related concerns. Applied linguistics at ASU is focused on simultaneous and developmental bilingualism in children and adolescents. The program is a partnership between the Mary Lou Fulton Teachers College and the College of Liberal Arts and Sciences.

Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation
There must be a minimum of 54 credit hours beyond the master's level, including a minimum of 12 units of dissertation credit. All students in the program must satisfy 21 units of foundations course work.
Because applied linguistics is interdisciplinary in nature, applicants may differ from one another with regard to their prior experience and preparation. For instance, while some applicants may have substantial prior training in core theoretical linguistics (foundations), others may have considerable preparation in an area related to a supported concentration. A student's academic advisor, in consultation with the program director and program oversight committee, may address potential redundancies in a student's program requirements with prior academic preparation by 1) allocating a maximum of 30 credit hours from an awarded and approved graduate degree toward the applied linguistics program requirements, and/or 2) permitting the student to take additional elective courses in lieu of introductory courses covered in an undergraduate program.
A. Foundations (21)

- Overview of the field: a three-credit course providing a survey of the field of applied linguistics.
- Linguistics: 15 credits of required course work in theoretical linguistics and one approved linguistics elective.
B. Teaching Internship (2)
C. Colloquia (4)

A four-semester sequence of 1-credit colloquium meetings for students in the first two years. All students and program faculty are encouraged to attend.
D. Research Methods (6)

Six credits of approved research methods courses selected in consultation with the advisor.
E. Concentration/Research (33)

Students select three to nine credits of required course work, depending upon the concentration area, plus additional approved electives for a total of 48 credits of concentration/research course work. Five concentration areas are supported:

- Bilingualism.
- Educational Linguistics.
- English as an International Language (EIL).
- Indigenous Language Education.
- Language Planning and Policy (LPP).
F. Breadth (6)

Six credits of course work in a secondary concentration area.
G. Dissertation (12)

Students in the applied linguistics doctoral program are additionally required to demonstrate proficiency in a second language equivalent to two years of study. A language appropriate to the student's area of interest is selected in consultation with the advisor. The language requirement must be satisfied, by examination or course work, prior to advancement to candidacy. Computer or other nonhuman languages may not be used to satisfy this requirement. Students for whom English is a second language may use their first language to satisfy the requirement by examination. Course credit used to satisfy the language requirement cannot be used to satisfy other program requirements, and cannot be counted toward the total required 84 credits.

Admission Requirements: Applicants must submit an online Graduate College application.
The application must include:

- An academic writing sample.
- Official GRE scores and transcripts of all undergraduate and graduate course work.
- A resume.
- A statement of interest outlining career and research goals.
- Three letters of recommendation addressing their academic promise for the program.

Applications are due January 15 for fall admission.
Students must have completed a bachelor's degree from a regionally accredited institution or university of recognized standing prior to admission into the program. Because applied linguistics is an interdisciplinary field, applicants with prior academic preparation in any field are welcome.
Please see the program website for additional information.

## Contact Information:

Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/gradstudies-phdappling
LL 543B
enggrad@asu.edu
480-965-3194

## Applied Mathematics, PHD (LAAPMPHD)

## Online Degree Search Title: Applied Mathematics (PHD)

Campus: TEMPE
Program Description: The Ph.D. includes rigorous training in fundamental applied mathematics and its application to real-world problems in fields such as:

- Biology.
- Geology.
- Physics.
- Various engineering disciplines.

All students will participate in individual and collaborative research.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The program includes:

- Five core courses.
- Three credit hours of seminar (591).
- Twelve credit hours of dissertation (799).

Students must pass a written comprehensive examination and an oral dissertation prospectus. Each student must write a dissertation and defend it orally in front of five dissertation committee members. See the department website for examination information.

Admission Requirements: Applicants must submit:

- The general GRE scores.
- The Graduate College online application.
- Official transcripts.
- A statement of education and career goals.
- Three letters of recommendation.

Minimum background for consideration of admission to the Ph.D. program in applied mathematics includes:

- A bachelor's degree in mathematics, applied mathematics, economics, engineering or a natural science from a regionally accredited university with a 3.00 GPA (on a 4.00 scale).
- Students must be competitive in an applicant pool as evidenced by course work in linear algebra (equivalent to ASU course MAT 342) and advanced calculus (equivalent to ASU course MAT 371).
- Scientific programming skills are also desirable.


## Contact Information:

Liberal Arts and Sciences, College of
School of Mathematical and Statistical Sciences
http://math.asu.edu/graduate
PSA 216
grad@math.la.asu.edu
480-965-3951

## Applied Mathematics for the Life \& Social Sciences, PHD (LAAMLPHD) <br> Online Degree Search Title: Applied Mathematics for the Life \& Social Sciences (PhD) <br> Campus: TEMPE

Program Description: The applied mathematics for the life and social sciences doctoral degree focuses on the training of researchers working on scientific questions at the interface of the mathematical, life and social sciences. Graduates of the program will be
making innovative and far-reaching scientific contributions that rely on the cutting-edge computational mathematical and modeling approaches. This degree focuses on producing quantitative scientists and applied mathematicians conducting high-level
interdisciplinary and crossdisciplinary research. The program's faculty includes mathematicians, statisticians, theoretical biologists and social scientists from five different schools at Arizona State University.
There is a high demand for first-rate scientists, researchers, and faculty interested in meeting the challenges faced by communities in the 21st century and by research and planning programs at institutions whose mission is to address global challenges. Arizona's and the nation's health, environmental and natural resource challenges are urgently in need of a large pool of researchers with these interdisciplinary skills.
There are three tracks a student can concentrate in:

- Applied mathematics: more in-depth focus on the tools themselves as applied to the life and social sciences, i.e., on dynamical systems, computational and numerical methods, simulation and mathematical analysis.
- Life sciences: focus on understanding the tools for representing the structure and operation of complex biological and ecological processes.
- Social sciences: focus on understanding the tools for representing the structure and operation of complex social systems and processes.

By offering courses that enhance interdisciplinary exchanges and collaboration among the faculty and students interested in addressing questions of social relevance, the program builds upon foundations already established in:

- Bioinformatics.
- Computational sciences.
- Ecology.
- Genomics.
- Mathematical analysis.
- Mathematical epidemiology.
- Nonlinear dynamics.
- Population dynamics.
- Social science fields.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The Ph.D. program consists of:

- A dissertation.
- Eighty-four hours of course work post-bachelor's.
- Fifty-four hours ( 30 course work, 12 research, and 12 dissertation hours) post-master's.
- A written comprehensive examination and the oral defense of a doctoral proposal/prospectus.

Students entering with an M.A. in a related field may be granted up to 30 credit hours toward the 84 hour total required for the Ph.D. Students without an M.A. must earn an additional 30 hours of graduate credit, selecting courses from a number of appropriate programs on campus. Students must 1) maintain a "B-" (3.20) average GPA in their courses, and 2) complete degree requirements per the program's satisfactory progress policy.
All students are required to complete a sequence of core courses. The core competencies consist of:

- Core math skills.
- Deterministic modeling or computational methods.
- Math biology.
- Statistics and probability.
- Stochastic modeling.

Admission Requirements: All applicants must submit a Graduate College online application.
In addition to general requirements for admission to the Graduate College, the School of Human Evolution and Social Change
(SHESC) requires applicants to provide:

- A current curriculum vitae or resume.
- Official GRE scores.
- An optional sample of their written work.
- A statement of purpose outlining career and educational goals.
- Three letters of academic recommendation.
- Transcripts of all undergraduate and graduate course work.

Prior to admission, students should have completed, at a 300 - or 400 -level, a minimum of the following:

- Fifteen hours of mathematics and/or statistics.
- A total of nine hours of life sciences and social sciences course work at the senior or college graduate level.
- No fewer than three hours each of life sciences and social sciences course work.

A master's degree in the social sciences (e.g., anthropology, sociology, gender studies, geography), life sciences or related fields (e.g., biology, genomics, ecology), applied mathematics, mathematics or statistics is preferred. A bachelor's degree in a relevant field from a regionally accredited university is required. Minimum GPA for consideration for admission is a 3.20 , on a 4.00 scale, for the last two years of study leading to the bachelor's degree. Given the interdisciplinary goals of the program, a diverse pool of students is desirable.

## Contact Information:

Liberal Arts and Sciences, College of School of Human Evolution \& Social Change
http://shesc.asu.edu/graduate_studies
SHESC 233
shescgrad@asu.edu
480-965-6215

## Asian Languages and Civilizations (Chinese), MA (LACHINAMA)

## Online Degree Search Title: Asian Languages/Civilizations (Chinese) - MA

Campus: TEMPE

Program Description: The Asian languages faculty in the School of International Letters and Cultures (SILC) offers a graduate program leading to an M.A. in Asian languages and civilizations-Chinese. In addition to preparing some students for further academic training, the program also helps to prepare students for jobs dealing with China (in such fields as law, business or journalism) and for entrance into professional schools.

Degree Requirements: 30 credit hours and a Thesis or 30 credit hours and a Thesis (MIP)
The plan of study for the M.A. includes a minimum of 30 credit hours of graduate-level work, as approved by the candidate's supervisory committee and a thesis. The plan must include a 500 -level bibliography and research methods course offered by the department. When approved by the candidate's supervisory committee, nine hours of advanced-level work in another language or in closely related courses may be included in the plan. Students who are primarily interested in teaching at the secondary or community college levels may select a plan of study with a concentration in language pedagogy.

Admission Requirements: Students interested in applying to the program must submit a Graduate College online application. Candidates for the M.A. should, upon entrance, present the equivalent of an undergraduate major in the language in which the degree is sought. Those who lack this background, but who show strong potential and meet Graduate College admissions requirements, may be admitted to a graduate program on a provisional basis, pending removal of specified deficiencies. These deficiencies must be completed in addition to the regular program of study for the master's degree.
See http://silc.clas.asu.edu/graduate/degrees/ma-chinese for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/graduate
LL 440
silc@asu.edu
480-965-6281

## Asian Languages and Civilizations (Japanese), MA (LAJAPANMA)

Online Degree Search Title: Asian Languages/Civilizations (Japanese) - MA
Campus: TEMPE
Program Description: The Asian languages faculty in the School of International Letters and Cultures (SILC) offers a graduate program leading to an M.A. in Asian languages and civilizations-Japanese. In addition to preparing some students for further academic training, the program also helps to prepare students for jobs dealing with Japan (in fields such as law, business or journalism) and for entrance into professional schools.

Degree Requirements: 30 credit hours and a Thesis or 30 credit hours including the required course (JPN 593) and an Applied Project
The plan of study for the M.A. includes a minimum of 30 credit hours of graduate-level work and a thesis, as approved by the candidate's supervisory committee. The plan must include a 500-level bibliography and research methods course offered by the department. When approved by the candidate's supervisory committee, nine hours of advanced-level work in another language or in closely related courses may be included in the plan.
Students who are primarily interested in teaching at the secondary or community college levels may select a plan of study with an area of study in language pedegogy. Students seeking an M.A. in Asian languages and civilization should consult with their Graduate College representative. In keeping with the idea of in-situ experience as a key ingredient for advanced intellectual understanding, all degree candidates must have spent at least nine continuous months in a Japanese language environment within four years of entering the program.

Admission Requirements: Students interested in applying to this program must submit an online Graduate College application. Candidates for the M.A. should, upon entrance, present the equivalent of an undergraduate major in the language in which the degree is sought. Those who lack this background, but who show strong potential and meet Graduate College admissions requirements, may be admitted to a graduate program on a conditional basis, pending removal of specified deficiencies. These deficiencies must be completed in addition to the regular plan of study for the master's degree.
See http://silc.clas.asu.edu/graduate/degrees/ma-japanese for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/graduate
LL 440
silc@asu.edu
480-965-6281

## Asian Studies (certificate), CERT (LAASIANCE)

Online Degree Search Title: Asian Studies (Grad Certificate)
Campus: TEMPE
Program Description: The graduate certificate in Asian studies offers graduate students an interdisciplinary specialization in Asian language and area studies. The certificate is available in two tracks:

- East Asia (China, Japan and Korea).
- Southeast Asia (Indonesia, Laos, Thailand and Vietnam).

Degree Requirements: 18 credit hours
The certificate requires:

- Completion of 18 credit hours, distributed among a language requirement.
- Core course requirements and electives.
- A thesis or capstone project on a topic related to the student's region of emphasis.

Some courses may be applied to both the certificate and the student's degree program.

Admission Requirements: Applicants must submit a Graduate College online application. Graduate students in any discipline may pursue a certificate in Asian studies in conjunction with their degree programs. This program is also open to students who already hold graduate degrees.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://www.asu.edu/asian
COOR
car@asu.edu
480-965-7184

Astrophysics, MS (LAASTPHMS)
Online Degree Search Title: Astrophysics (MS)

## Campus: TEMPE

Program Description: The program provides fundamental graduate training in astrophysics to prepare candidates for careers in astrophysics, such as:

- Further graduate study.
- Scientific staff positions at government laboratories.
- Teaching at the community college level.
- Technical positions in industry.

Degree Requirements: 30 credit hours a Master's Research Paper and a Written Comprehensive Exam (MIP) or 30 credit hours and a Thesis

Twenty credit hours are structured courses. The student, with the approval of the advisor and supervisory committee (formed upon enrollment), selects courses that make up a coherent program of study.
It is normally expected that course work consists of the existing AST 521/522/523 and AST 531/532/533 graduate sequences, which provide comprehensive graduate training in the major fields of astrophysics. These courses are combined with additional work in core fields such as physics or mathematics.
Students are expected to exhibit mastery of topics in these core fields, and may be required by their advisor and committee to include such courses in their program of study. Specific course requirements may be waived by the advisor if the student has successfully completed equivalent courses at universities elsewhere. Individual programs of study that include work in related fields may also be designed with advisor approval, subject to the requirements of the ASU Graduate College.
M.S. plans of study also include six credit hours of thesis credit (AST 599). Students must follow ASU Graduate College policies and procedures for admission to the program and for fulfilling the requirements of the degree.
Thesis requirements: A thesis based on observational, theoretical, laboratory and/or literature research in astrophysics is required. Final Examination: A final oral examination in defense of the thesis is required.

Admission Requirements: Applicants must submit the Graduate College online application. In addition to the materials required by the ASU Graduate College, students applying for admission to the M.S. in astrophysics program must submit:

- Scores on the general GRE (verbal, quantitative and analytical).
- Scores on the physics GRE.
- A statement of purpose.
- Three letters of recommendation.

The deadline for applications for the fall term is Jan. 15. Students must apply using the Graduate College online application.

## Contact Information:

Liberal Arts and Sciences, College of
School of Earth and Space Exploration
http://sese.asu.edu
PSF 686
seseinfo@asu.edu
480-965-5081

## Astrophysics, PHD (LAASTPHPHD)

Online Degree Search Title: Astrophysics (PhD) Campus: TEMPE

Program Description: The Ph.D. in astrophysics program is designed to develop creative scholarship and prepare students for professional careers in astrophysics, astronomy or related fields.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation Students may be admitted into the program with a bachelor's or master's degree in a related field. Up to 30 credit hours of master'slevel work in a related field can be accepted toward the fulfillment of the Ph.D. requirements.
The plan of study for the Ph.D. will be selected with the recommendation of the student's supervisory committee, and should include sufficient course work to assure mastery of fields such as:

- Classical mechanics.
- Electrodynamics.
- Quantum mechanics.
- Statistical physics.
- Other core subjects in addition to those covered in the six-course core AST sequence.

Each plan of study must include 12 credit hours of dissertation (AST 799) and 25 credits of coursework including AST 521/522/533 and AST 531/532/533. Specific course requirements may be waived by the advisor if the student has successfully completed equivalent courses at universities elsewhere. ASU Graduate College policies and procedures must also be met for fulfilling the requirements of the degree.
Comprehensive Examination: The student's supervisory committee will determine the content of the comprehensive examination, consisting of a written and an oral examination.
Dissertation Requirements: A dissertation is required which is based on original work demonstrating creativity in research and scholarly proficiency in the subject area.
Final Examination: A final oral examination in defense of the dissertation is required.
Admission Requirements: Applicants must submit the Graduate College online application.
In addition to the materials required by the ASU Graduate College, students applying to the Ph.D. in astrophysics program must submit:

- Scores on the general GRE (verbal, quantitative and analytical).
- Scores on the GRE physics subject test.
- A statement of purpose.
- Three letters of recommendation.

The application deadline for fall semester is Jan. 15.

## Contact Information:

Liberal Arts and Sciences, College of
School of Earth and Space Exploration
http://sese.asu.edu
PSF 686
seseinfo@asu.edu
480-965-5081

## Atmospheric Science (certificate), CERT (LAATMOSCE)

Online Degree Search Title: Atmospheric Science (Grad Certificate)
Campus: TEMPE

Program Description: The interdisciplinary certificate in atmospheric science program is administered by an executive committee composed of faculty from the Ira A. Fulton Schools of Engineering and the College of Liberal Arts and Sciences. The objective of this program is to recognize ASU graduate students who specialize in a thesis or dissertation topic related to the atmospheric or oceanic sciences.
Students must complete a dissertation on a topic related to the atmospheric or oceanic sciences under the supervision of a faculty member from one of the cooperating departments. For more information, please see http://geoplan.asu.edu/.

Degree Requirements: 16 credit hours
A minimum of 16 credit hours will be required in order to qualify for the atmospheric science certificate, consisting of:

- Three (three-credit) courses from a list of courses in the core disciplines.
- Two courses from a list of electives (400-level or above).
- A capstone seminar (one credit hour).

Considering the diversity of courses and in order to ensure an interdisciplinary flavor, each prospective recipient will have his/her certificate program approved by the certificate executive committee. Certificates will only be awarded to students who are enrolled in an M.A., M.S., M.N.S. or Ph.D. program at ASU. The student's thesis or dissertation must also be related to some aspect of atmospheric science.
The core courses are offered at least once every other year, so the certificate may be completed within two years.
Specific requirements are:

- Approval by the certificate committee of the student's proposed course selection.
- Completion of one course from each of the core disciplines with a grade of "B" (3.00) or better.
- Completion of two courses from the list of electives with a grade of "B" (3.00) or better.
- Completion of the capstone seminar, which is one credit hour.
- Completion of a dissertation on a topic related to the atmospheric or oceanic sciences.

Admission Requirements: In order to apply to a graduate program, the applicant must complete the Graduate College online application and meet all other requirements to be admitted to graduate study at ASU.
Certificates will only be awarded to students who are enrolled in an M.A., M.S., M.N.S. or Ph.D. program at ASU.

## Contact Information:

Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/atmocert/
COOR 5673
geoplan@asu.edu
480-965-7533

## Audiology, AudD (LAAUDAUDD)

Online Degree Search Title: Audiology (AuD)
Campus: TEMPE
Program Description: The Au.D. program is designed to prepare audiologists for autonomous clinical practice. The clinical doctorate model at ASU stresses the integration of academic classroom learning and practical experience across a broad spectrum of clinical specialties and practice environments.

Degree Requirements: 95 credit hours and a Written Comprehensive Exam
The Au.D. program is designed for full-time students over a period of 45 months, including four fall and four spring semesters and three summers. The four-year course of study includes both academic and clinical practicum components. The Au.D. program requires a minimum of 95 credit hours, of which 63 are required academic credits provided through the Department of Speech and Hearing Science, and 32 are required clinical credits.
Eligibility for graduation is based upon the following:

- Achieving a passing score on the ASHA Praxis national certification examination in audiology.
- Successful completion of 63 credit hours of required academic course work.
- Successful completion of 32 credit hours of clinical experiences.

Admission Requirements: All applicants must submit a Graduate College online application and have a cumulative GPA of 3.00 or higher. An applicant to the Au.D. program must hold a bachelor's degree in speech and hearing science or another discipline. Applicants must submit:

- A 200-word statement of intent containing evidence of proficiency in written communication.
- GRE scores.
- Official transcripts.
- Three letters of recommendation.

All application materials must be submitted to the graduate admissions office by Jan. 15. Enrollment begins in the fall semester only.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Speech and Hearing Science
http://shs.asu.edu
COOR 2211
shsgrad@asu.edu
480-965-2374

## Biochemistry, PHD (LABIOCHPHD)

## Online Degree Search Title: Biochemistry (PhD) <br> Campus: TEMPE

Program Description: The faculty in the Department of Chemistry and Biochemistry offer a program leading to the Ph.D. in biochemistry. The program offers a wide range of active research with an emphasis on contemporary and interdisciplinary study in the areas of biochemistry, life sciences and other biochemistry related fields. A few of the many topics currently being researched:

- Biogeochemistry.
- Drug design.
- Medicinal chemistry.
- Nanobiotechnology.
- Protein chemistry.
- RNA-protein interactions.

The faculty also participate in a number of other interdisciplinary programs leading to the Ph.D. See
http://chemistry.asu.edu/graduate/facultyResearch.asp for information on faculty research and the state-of-the art facilities available for conducting high quality investigations. The Ph.D. in biochemistry prepares students for professional careers in industry, government and educational institutions.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

- Completion of a successful dissertation oral defense.
- Courses are selected by the student in consultation with his/her supervisory committee based upon research area.
- Demonstrated quality performance in the laboratory and completion of his/her research project.
- A doctoral comprehensive examination, consisting of both a written and oral presentation of current research and an original research proposal is required for advancement to candidacy.
- Evidence of a publishable contribution of original research.
- Meeting all deadline dates and requirements set by the Graduate College.
- A minimum of 84 credit hours, including course work, seminars, research and dissertation are required.
- The Ph.D. in biochemistry is awarded when the student has obtained a minimum cumulative GPA of 3.00 in course work.

Admission Requirements: All students applying for admission to the program must meet the requirements set by the Graduate College which can be found on Graduate College website. Applicants must submit the Graduate College online application and also submit original scores for the GRE. The subject test is not required.
Application to the Department of Chemistry and Biochemistry includes:

- The completion of the electronic supplemental application to include test scores.
- A personal statement.
- Three letters of recommendation with contact information.

Information on the supplemental application can be found at: http://chemistry.asu.edu/graduate/applicantInfo.asp.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Chemistry and Biochemistry
http://chemistry.asu.edu/graduate/
PSD 103
chmgrad@asu.edu
480-965-4664

## Biology, MS (LABIOMS)

Online Degree Search Title: Biology (MS)
Campus: TEMPE

Program Description: This program is designed to prepare students for careers in teaching and research in educational, medical, industrial and governmental institutions.

Degree Requirements: 30 credit hours and a Thesis or 30 credit hours and an Oral Comprehensive Exam (MIP)

- Courses and research credits can be distributed in any combination appropriate to the student's individual educational goals.
- A final oral examination covering the thesis and related subject matter is administered by the supervisory committee.
- A minimum of 30 credit hours is required.
- The program of each student is prepared in consultation with the supervisory committee, consisting of a major professor and two additional faculty members.
- The program must include six hours of thesis and one hour of seminar.
- The remainder of the program of study usually consists of a mixture of course work, readings and conference and seminars in the student's primary field and related fields, and research credits.
- A typical program of study consists of six credit hours of thesis, one credit hour of seminar, nine to 15 hours of course work and additional seminars, and eight to 14 credit hours of research credit.

Admission Requirements: Applicants must submit a Graduate College online application. Admission criteria are as follows:

- A 3.00 minimum GPA during the student's last two years or last 60 credit hours.
- Applicants should have completed the requirements for an undergraduate major in biology or related discipline.
- Minimum GRE scores in verbal (50th percentile), quantitative (70th percentile), and writing (5).
- Test of English as a Foreign Language (TOEFL) scores of 600 paper-based or 100 internet-based.


## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad/
LSC 226
sols.grad@asu.edu
480-965-1768

## Biology, PHD (LABIOPHD)

Online Degree Search Title: Biology (PhD)
Campus: TEMPE

Program Description: The Ph.D. in biology program allows the student to acquire high research competency in one or more specialized areas while receiving a broad, solid grounding in biological sciences.

Degree Requirements: 84 credit hours a Oral Comprehensive Exam a Prospectus and a Dissertation

- Eighty-four credit hours are required.
- An oral comprehensive examination is required in order to advance to candidacy, and a formal defense of the final written dissertation is required prior to graduation.
- The plan of study is planned by the student and the supervisory committee, consisting of a major professor and four additional faculty members.
- The program is tailored to the needs of the individual student.
- Twelve hours of dissertation are required and the remaining hours are comprised of course work showing breadth in biology subdisciplines, seminars and research.

Admission Requirements: Applicants must submit a Graduate College online application. Admission criteria are as follows:

- A 3.00 minimum GPA during the student's last two years or last 60 credit hours.
- Applicants should have completed the requirements for an undergraduate major in biology, or related discipline, with an adequate background in related courses in chemistry, mathematical and physical sciences.
- Minimum GRE scores in verbal (50th percentile), quantitative (70th percentile), and writing (5).
- Test of English as a Foreign Language (TOEFL) scores of 600 paper-based or 100 internet-based.


## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad
LSC 226
sols.grad@asu.edu
480-965-1768

## Biology (Biology and Society), MS (LABIOSMS)

Online Degree Search Title: Biology (Biology and Society) (MS)
Campus: TEMPE
Program Description: Within the biology degree programs, students may choose a formal concentration in the areas where biology intersects with society. There are two tracks: 1) bioethics, policy and law, and 2) history and philosophy of science.
The bioethics, policy and law track trains students in the pressing moral, policy and legal issues raised by the biosciences and biomedicine and in the disciplinary methods necessary to address these issues. The history and philosophy of science track trains students in the conceptual foundations of science, including especially the epistemological and methodological assumptions that shape science and its progress.

The program is richly interdisciplinary, drawing from the following and other disciplines to develop skills for analyzing and addressing the problems where biology intersects with society:

- Anthropology.
- Biology.
- Health administration of policy.
- History.
- Justice studies.
- Law.
- Nursing.
- Philosophy.
- Political science.
- Religious studies.

The concentration tailors individual programs of study to individual needs and interests, with a solid grounding in the life and related sciences and with rigorous analytical and multidisciplinary education. The two tracks offer suggested courses for those wishing to focus on these areas.

Degree Requirements: 30 credit hours and a Thesis

Admission Requirements: Individuals interested in applying to the M.S. in biology and society must:

- Complete the Graduate College online application.
- Send the general GRE scores (the subject examination in not required).
- Submit a writing sample.
- Submit a statement of educational background and interest relevant to this degree concentration.


## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad/bio_soc.php
LSC 226
sols.grad@asu.edu
480-965-1768

## Biology (Biology and Society), PHD (LABIOSPHD)

Online Degree Search Title: Biology (Biology and Society) (PhD)
Campus: TEMPE

Program Description: Within the biology degree programs, students may choose a formal concentration in the areas where biology intersects with society. There are two tracks: 1) bioethics, policy and law, and 2) history and philosophy of science.
The bioethics, policy and law track trains students in the pressing moral, policy and legal issues raised by the biosciences and biomedicine and in the disciplinary methods necessary to address these issues. The history and philosophy of science track trains students in the conceptual foundations of science, including especially the epistemological and methodological assumptions that shape science and its progress.
The program is richly interdisciplinary, drawing from the following and other disciplines to develop skills for analyzing and addressing the problems where biology intersects with society:

- Anthropology.
- Biology.
- Health administration of policy.
- History.
- Justice studies.
- Law.
- Nursing.
- Philosophy.
- Political science.
- Religious studies.

The concentration tailors individual programs of study to individual needs and interests, with a solid grounding in the life and related sciences and with rigorous analytical and multidisciplinary education. The two tracks offer suggested courses for those wishing to focus on these areas.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

- Eighty-four credit hours are required.
- Written and oral comprehensive examinations are required in order to advance to candidacy, and a formal defense of the final written dissertation is required prior to graduation.
- The plan of study is planned by the student and the supervisory committee, consisting of a major professor and four additional faculty members.
- The program is tailored to the needs of the individual student.
- Twelve hours of dissertation are required and the remaining hours are comprised of course work showing breadth in biology subdisciplines, seminars and research.

Admission Requirements: Students must submit an online application to the Graduate College.

- Select "Sciences (Life, Natural, Physical and Chemical)" as your degree program category.
- Select "Tempe" as your degree program campus.
- Select "Biology Ph.D. Degree" as your degree program.
- Identify the specific biology program faculty member(s) you are interested in working with. This will ensure that these faculty members see your application and can participate in admissions and funding decisions.
- Download and print three copies of the School of Life Sciences recommendation form at http://sols.asu.edu/grad/pdf/recommend_form.pdf.
- Complete and sign the top portion of each form.
- Give one form to each of the three persons who will be writing your letters of recommendation
- Ask the letter writers to mail paper copies of both the form and their letters of recommendation to:

Graduate Programs
School of Life Sciences
Biology Ph.D. Program
Arizona State University
P.O. Box 874601

Tempe, AZ 85287-4601

- Prepare and upload the School of Life Sciences academic record form at
http://sols.asu.edu/grad/pdf/academic_record_form.doc.
International Students: Students applying from outside of the U.S. will need to submit additional documents at http://graduate.asu.edu/admissions/international.html. Students from countries whose native language is not English must provide evidence of English proficiency with acceptable scores on the Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS). TOEFL and IELTS scores must be current, with the test date within two years of the first day of classes of the semester you enroll at ASU. Students who wish to attend ASU while holding a student visa (F-1 or J-1) will need to submit a financial guarantee form at http://graduate.asu.edu/f1j1applicants.html.
The biology and society concentration within the biology doctoral program admits one cohort annually for plans of study that begin in the fall semester. The deadline for applications is Dec. 15 for students wishing to begin a program of study the following August. There is no guarantee that applications received after Dec. 15 will be reviewed. The biology Ph.D. program usually notifies applicants of admissions status no later than the following April 15. Top candidates are usually interviewed prior to admission to the program. Please check out our tips on applying for graduate study in the School of Life Sciences at http://sols.asu.edu/grad/apply_tips.php for additional information.


## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad/bio_soc.php
LSC 226
sols.grad@asu.edu
480-965-1768
Chemistry, PHD (LACHEMPHD)

Program Description: The faculty in the Department of Chemistry and Biochemistry offer a program leading to the Ph.D. in
chemistry. Areas of study include:

- Analytical chemistry.
- Biochemistry.
- Chemical education.
- Geochemistry.
- Inorganic chemistry.
- Organic chemistry.
- Physical chemistry.
- Solid-state chemistry.

A few of the many topics currently being researched:

- Dynamics of liquids and glasses.
- Environmental chemistry.
- Functional semiconductors.
- Genome analysis.
- Nanomaterials.
- Organic and inorganic synthesis.
- Photosynthesis and photochemistry.
- Theoretical chemistry.

See http://chemistry.asu.edu/graduate/facultyResearch.asp for information on faculty research and the state-of-the-art facilities available for conducting high quality investigations. The Ph.D. in chemistry prepares students for professional careers in industry, government and educational institutions.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

- Courses are selected by the student in consultation with his/her supervisory committee based upon research area.
- A doctoral comprehensive examination consisting of both a written and oral presentation of current research and an original research proposal is required for advancement to candidacy.
- A minimum of 84 credit hours, including course work, seminars, research, and dissertation, are required.

The Ph.D. in chemistry is awarded when the student has obtained:

- Completing a successful dissertation oral defense.
- Demonstrated quality performance in the laboratory and completion of his/her research project.
- Evidence of a publishable contribution of original research.
- Meeting all deadline dates and requirements set by the Graduate College.
- A minimum cumulative GPA of 3.00 in course work.

Admission Requirements: All students applying for admission to the program must meet the requirements set by the Graduate College which can be found on the Graduate College website. Applicants must submit the Graduate College online application and official scores for the GRE. The subject test is not required.
Application to the Department of Chemistry and Biochemistry includes:

- The completion of an electronic supplemental application providing information on test scores.
- Contact information for three letters of recommendation.
- A personal statement.

Information on the supplemental application can be found at http://chemistry.asu.edu/graduate/applicantInfo.asp.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Chemistry and Biochemistry
http://chemistry.asu.edu/graduate
PSD 103
chmgrad@asu.edu
480-965-4664

## Communication, MA (LACOMMOMA)

Online Degree Search Title: Communication (MA) Campus: TEMPE

Program Description: The faculty in the Hugh Downs School of Human Communication offer a program leading to the M.A. in communication. Current areas of study within the major are:

- Intercultural communication.
- Interpersonal communication.
- Organizational communication.
- Performance studies.
- Rhetorical studies.

Degree Requirements: 30 credit hours a Written Comprehensive Exam and an Oral Comprehensive Exam (MIP) or 30 credit hours and a Thesis or 30 credit hours and a Written Comprehensive Exam or 30 credit hours including the required course (COM 593) and an Applied Project

The program consists of a minimum of 30 credit hours of graduate course work, which includes six hours of thesis credit for students who select the thesis option. All students must successfully complete the following:

- COM 501 Research Methods in Communication with a minimum grade of "B" (3.00).
- COM 504 Theories and Models in Communication with a minimum grade of " $B$ " (3.00).
- At least one of the following three courses: COM 508 Quantitative Research Methods in Communication, COM 509 Qualitative Research Methods in Communication or COM 521 Rhetorical Criticism of Public Discourse with a minimum grade of "B" (3.00).
- At least three content seminars (COM courses numbered 691).
- Students may choose to complete either a thesis or one of two nonthesis tracks.
- Thesis track: students must complete a thesis of original research, and an oral examination in defense of the thesis.
- Nonthesis Track Option 1 - Applied Project: students must complete an applied project (e.g., design a training program, evaluate existing training or communication program, conduct and write a report of a facilitated workshop, take mediation training and work with a client, create and present a performance, analyze a health campaign, write a research report) in a three credit hour 593 omnibus designated course and defend the project in an oral examination. The applied project must be approved by the student's supervisory committee.
- Nonthesis Track Option 2 - Comprehensive Examination: Students must complete a four hour noncredit written comprehensive examination covering communication theory, methodology and the student's area of emphasis.

Students must have an approved plan of study prior to scheduling their comprehensive examination and/or registering for their applied project course.

Admission Requirements: Admission is competitive, based upon evidence of the applicant's scholarly and research abilities. All applicants must submit the following:

- All applicants whose native language is not English must submit Test of English as a Foreign Language (TOEFL) scores; minimum scores are 600 on the paper version of this test or 83 on the internet version of this test.
- A Graduate College application, completed online, along with official undergraduate and graduate transcripts.
- GRE scores (verbal, quantitative, and analytical writing) taken within the past five years, plus other relevant test data provided by the applicant.
- A statement of professional goals (approximately 500 words).
- Three letters of recommendation prepared within the preceding 12 months.
- A writing sample.

A completed application for admission and official transcripts of all undergraduate and graduate work must be submitted to the graduate admissions office. See http://graduate.asu.edu/ for Graduate College general requirements. All application materials must be received by February 1. Late applications cannot be considered.

## Contact Information:

Liberal Arts and Sciences, College of
Hugh Downs School of Human Communication
http://humancommunication.clas.asu.edu/
STAUF 412
communication@asu.edu

## Communication, PHD (LACOMMOPHD)

## Online Degree Search Title: Communication (PhD)

 Campus: TEMPEProgram Description: The graduate faculty of communication offers an interdisciplinary graduate program leading to the Ph.D. in communication. Concentrations are available in interpersonal, intercultural, and organizational communication.
The program is housed in the Hugh Downs School of Human Communication and is designed to prepare scholars for researchoriented careers in universities and in the public or private sectors. Students are provided training in communication theory, research methodology and a specialization in one or more areas of concentration. The goal of the program is to meet the needs of students whose interests transcend traditional disciplinary boundaries.

Degree Requirements: 96 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

If the student has completed an appropriate master's degree, the Ph.D. requires a minimum of 66 hours beyond the master's degree.
Course work for a typical program of study is distributed as follows:

- COM 799 Dissertation (12).
- COM 792 Research (12).
- Area of concentration (36).
- Required core courses (6).
- Up to 12 credit hours of research (COM 792) may be taken before admission to candidacy.
- Two interdisciplinary theory and methodology courses are required of all students entering the program.
- The required theory course is COM 604 Theory Construction in Communication.
- Students are required to take three credit hours of COM 792 R: Prospectus/Dissertation Practicum and three semester hours of COM 792 R: Seminar Assistant.
- Students must take one of the three advanced methods courses:

COM 607 Contemporary Rhetorical Methods
COM 608 Multivariate Statistical Analysis of Data in Communication
COM 609 Advanced Qualitative Research Methods in Communication

- The student is also required to demonstrate proficiency in research methods (statistics, computer languages, content analysis
methods, interviewing, participant observation, etc.) which, in the judgment of the supervisory committee, is needed for the student's dissertation research. Evidence of required proficiency may be demonstrated by established university examination procedures or by successful completion of a sequence of courses designated by the student's program committee.

The initial course work for students admitted with only a bachelor's degree is similar to the M.A. in communication degree requirements except that no thesis is required:

- Electives from communication or other disciplines.
- A general overview of research in communication (COM 501).
- An overview of theories and models of communication (COM 504).

The methods, theory, and statistics courses must be completed before beginning the required theory and methodology sequence for the Ph.D. (i.e., they are prerequisites for the required courses).
There is a Masters in Passing option for students admitted with only a bachelor's degree. To receive an M.A. in passing, a student must complete a 10 -hour qualifying exam (including an oral defense) in the semester after completing (or during the semester in which the student completes) 24 hours of graduate work with an average grade of B or higher. Typically, the qualifying exam takes place in the spring semester after the second year of graduate study.

Admission Requirements: Applicants must submit:

- A Graduate College online application.
- GRE scores.
- Official transcripts.
- Resume\Statement of goals.
- Test of English as a Foreign Language (TOEFL) scores, if applicable.
- Three letters of recommendation.
- Writing sample.

Please visit the Hugh Downs School of Human Communication website for details.

## Contact Information:

Liberal Arts and Sciences, College of
Hugh Downs School of Human Communication
http://humancommunication.clas.asu.edu/
STAUF 412
communication@asu.edu
480-965-5095

## Communication Disorders, MS (LACOMDISMS)

Online Degree Search Title: Communication Disorders (MS)
Campus: TEMPE

Program Description: The faculty in the Department of Speech and Hearing Science offer a program leading to the M.S. in communication disorders. Thesis and nonthesis degree options are available. The speech-language pathology program is accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association (ASHA).

Degree Requirements: 33 credit hours and a Written Comprehensive Exam (MIP) or 53 credit hours a Thesis and a Written Comprehensive Exam or 53 credit hours and a Written Comprehensive Exam

The M.S. in communication disorders requires one of the following: 1) fifty-three credit hours and written comprehensive examination and a national certification examination, or 2) fifty-three credit hours and a thesis and a national certification examination, which includes 14 credits of practicum and internship.
Thesis Option
Students wishing to pursue the thesis option must complete 53 credit hours of course work, six hours of which must be thesis credit, and 14 credits of which must be practicum and internship. The thesis must meet requirements established by the Graduate College. Nonthesis Option
Students choosing the nonthesis option must complete 53 credit hours of course work, 14 of which must be practicum and internship.
Final Examinations
For the M.S. thesis option, two final examinations are required:

- The ASHA Praxis national certification examination in speech-language pathology.
- An oral defense of the thesis.

For the M.S. nonthesis option, two final examinations are required, 1) a department-administered comprehensive examination in speech-language pathology, and 2) the ASHA Praxis national certification examination in speech-language pathology.

Admission Requirements: Applicants must submit a Graduate College online application. Students applying for admission to this program should submit to the graduate admissions office:

- E-mail addresses of three recommenders.
- GRE scores.
- A statement of professional and academic goals not to exceed 300 words.
- Undergraduate transcripts.

All materials must be received by Jan. 15 for fall admission, which is the only term in which students may begin their program of study. Candidates who have undergraduate deficiencies may need to take required prerequisite courses.

## Contact Information:

Liberal Arts and Sciences, College of Department of Speech and Hearing Science
http://shs.asu.edu/
COOR 2211
shsgrad@asu.edu
480-965-2374

## Campus: TEMPE

Program Description: The ASU Master of Fine Arts in creative writing has always been an unswervingly student-first program. Through small classes, intimate workshops, and practicum, or one-to-one mentoring, the centuries-old apprenticeship model thrives within the New American University. Poets and fiction writers work with an outstanding faculty that has published more than 80 books and has garnered national and international attention through awards including:

- Guggenheim and NEA fellowships.
- Two Medals of Achievement from the National Society of Arts and Letters.
- A Pulitzer Prize.
- The Western States Book Award.
- The Walt Whitman Award from the Academy of American Poets.
M.F.A. students at ASU are among the best-funded in the nation: every poet and fiction writer is offered a teaching assistantship and a Piper Fellowship, both renewable for each of the program's three years. A limited number of research assistantships are available to continuing students.

Degree Requirements: 48 credit hours a Practicum and a Written Comprehensive Exam
The M.F.A. creative writing program requires 48 credit hours of study evenly divided between writing courses and literature courses designed to inform that writing. While students are expected to satisfy these requirements in the genre in which they were accepted, the program encourages cross-genre study, and electives can include courses taken outside of the creative writing program, even outside the English department. A practicum project and a written comprehensive exam are required.

Admission Requirements: Applicants should have an undergraduate major in English or creative writing, with a GPA of 3.00 or above ( 4.00 scale); however, exceptional students who do not have either of these undergraduate majors may be admitted on the basis of writing excellence. Applicants must submit three copies of the creative manuscript ( 20 pages of poetry, 30 pages of prose, or both) and three letters of recommendation directly to:

Creative Writing Program
Department of English, ASU
P.O. Box 870302

Tempe, AZ, 85287-0302

Mail transcripts to:

ASU Graduate College
P.O. Box 871003

Tempe, AZ 85287-1003

Submit the remaining parts of the application online to the Graduate College:

- Application fee.
- A personal statement including your writing background, intended area of specialization, a brief self-evaluation of recent work, and goals.
- Resume or curriculum vitae.
- A teaching assistant application.

The application deadline is Jan. 15. The program admits for the fall semester only.

## Contact Information:

Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/cw-admission
PWH 205
enggrad@asu.edu
480-965-3528

## East Asian Languages and Civilizations (Chinese), PHD (LAEALCPHD)

Online Degree Search Title: East Asian Languages and Civilization (PhD)

## Campus: TEMPE

Program Description: The Ph.D. program in East Asian languages and civilizations is a research-intensive, interdisciplinary, areabased degree in the study of traditional and modern languages and cultures of China and Japan. Students may focus on:

- Comparative cultural studies.
- Cultural history or linguistics.
- Literature.
- Literary criticism.

In every case, students will be expected to acquire a solid grounding in the classical and modern versions in the primary language of their area.

Degree Requirements: 84 credit hours two Foreign Language Exams a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

The program requires a minimum of 84 credit hours of which 30 hours from an earned master's degree program that is directly relevant to the Ph.D. program may be counted toward that requirement. However, a minimum of 30 credit hours of course work and 24 hours of research are required beyond the M.A. level. If a student already has an M.A., it will not be necessary to complete the existing School of International Letters and Cultures M.A. in Asian languages and civilizations. However, the student will be required to satisfy all course requirements for the M.A.
All students, whether in Chinese or Japanese, are required to complete:

- Demonstrate reading knowledge of a second pertinent Asian language and one pertinent European language, aside from English.
- Five seminars.
- A minimum of six courses selected from advanced courses in literature, religions or intellectual history.
- SLC 500 Theory and Methodology in East Asian Literature and Culture.
- Students must submit a dissertation and pass an oral defense of that dissertation.
- Twelve core requirements.
- Written and oral comprehensive examinations in four fields, three of which must be selected from areas that are wellrepresented within the East Asian languages and civilizations Ph.D. graduate curriculum.

Admission Requirements: Potential applicants who hold a bachelor's degree from a regionally accredited institution in a related field are eligible to apply to the program. The following entry-level competencies are needed for admission to the program: Chinese concentration
Completion of at least three years of modern Chinese and one year of classical Chinese.
Japanese concentration
Completion of at least three years of modern Japanese and one semester of classical Japanese.
All applicants are required to submit:

- An official ASU Graduate College online application.
- Official GRE scores.
- Official transcripts of all undergraduate and graduate course work.
- A statement of career and educational goals.
- Three letters of recommendation (two of which should be academic recommendations).

Regular admission may be granted to applicants who have achieved a GPA of 3.30 ( 4.00 scale) or better in the last two years of work leading to the bachelor's degree and who are competitive in the applicant pool as evidenced by GRE scores (verbal, quantitative and analytical), the statement of career and educational goals and the letters of recommendation.
See: http://silc.clas.asu.edu/graduate/degrees/phd-chinese for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/graduate
LL 440
silc@asu.edu
480-965-2715

English, MA (LAENGLMA)

Program Description: The M.A. in English encompasses four distinct concentrations. Literature students develop and hone skills in oral presentation, writing and critical thinking while exploring social, historical and cultural contexts.
In the broad-based and global linguistics concentration, students study theory and application focusing on phonology, syntax, sociolinguistics, historical linguistics and second language acquisition.
The rhetoric and composition concentration offers a wide array of courses encompassing the history, theory and practice of rhetoric and pedagogy of writing.
Comparative literature students interpret cultural productions in English and at least one other language, and explore approaches ranging from textual criticism, critical theory and translation to cultural studies and the social sciences.
The M.A. in English prepares students to be teachers, scholars, writers and editors, and to work in a variety of professions, including government, advertising, fundraising and public relations.

Degree Requirements: 30 credit hours a Thesis and a Foreign Language Exam or 30 credit hours including the required course (LIN 593 or ENG 593) a Foreign Language Exam and an Applied Project or 33 credit hours and a Written Comprehensive Exam (MIP)

A student may pursue a concentration in comparative literature, English linguistics, literature or rhetoric and composition. All concentrations have a foreign language requirement.
For the concentration in comparative literature, a candidate must complete:

- ENG 599 Thesis or ENG 593 Applied Project (non-thesis option).
- Six credit hours of special topic courses.
- Thirty credit hours of graduate courses, with a minimum of 12 credit hours being taken in the School of International Letters and Cultures.
- Two courses in concepts and methodology (one of which must be bibliographical methods).

For the concentration in English linguistics, two tracks are available. A candidate must complete a minimum of 30 credit hours of graduate-level courses:

- The applied linguistics track must include: LIN 500 ; 511 or $514 ; 515$ or 516 ; and 520 and a course from a selection of advanced linguistics courses.
- Electives are chosen in consultation with the advisor.
- ENG 599 Thesis or ENG 593 Applied Project (non-thesis option).
- The general linguistics track must include: LIN 500, 511, 514 and 515 and one advanced linguistics course.

For the concentration in literature, a candidate must complete a minimum of 30 credit hours. The hours must include:

- A course in literary theory.
- Electives are chosen in consultation with the advisor.
- ENG 500 Research Methods.
- ENG 599 Thesis or ENG 593 Applied Project (non-thesis option).
- A nine-credit-hour distribution requirement.
- Two courses selected must be graduate seminars at the 600 level.

For the concentration in rhetoric and composition, a candidate must complete a minimum of 30 credit hours of graduate courses, and these hours must include:

- A course in composition theory.
- A course in rhetoric theory.
- Electives are chosen in consultation with the advisor.
- ENG 500 Research Methods.
- ENG 599 Thesis or ENG 597 Capstone Course.
- Fifteen elective course hours, that must include six credit hours of graduate seminars at the 600 level.

Admission Requirements: Applicants must submit a Graduate College online application. The application deadline is Jan. 15 for most programs. Linguistics has a Sept. 15 deadline for spring and deadlines of Jan. 15 and April 15 for fall admission. Applicants for the M.A. in English program with a concentration in literature are required to have an undergraduate major in English. Those who do not have a major in English are encouraged to register as non-degree students while they take courses in areas of deficiency, as identified by the advisor. Applicants must also submit:

- An academic writing sample relevant to the field.
- GRE general test scores.
- A resume.
- A statement of purpose.
- Three letters of recommendation.

Applicants for the M.A. in English program with a concentration in linguistics and with a concentration in rhetoric and composition may have undergraduate majors in fields such as, but not limited to:

- Anthropology.
- Applied linguistics.
- Cognitive science.
- Communication.
- Comparative languages and literatures.
- Education.
- English literature.
- History.
- Law.
- Linguistics.
- Modern languages.
- Philosophy.
- Political science.
- Psychology.
- Religion.
- Rhetoric/composition.
- Sociology.
- Speech and hearing science.

Students should consult with an advisor to determine whether their preparation is deficient in any area. Applicants must also submit:

- Three letters of recommendation.
- A resume.
- A statement of purpose.

Applicants for the rhetoric and composition concentration must also submit 1) an academic writing sample relevant to the field, and 2) GRE general test scores.

Applicants for the linguistics concentration must show completion of one upper-division course in a linguistics-related field.
Applicants for the M.A. in English program with a concentration in comparative literature must:

- Prove fluency in a foreign language to a level sufficient for graduate study.
- Submit an academic writing sample relevant to the field.
- Submit a statement of purpose.
- Submit three letters of recommendation.


## Contact Information:

Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/graduate
LL 543B
enggrad@asu.edu
480-965-3194

## English (Literature), PHD (LAENLITPHD) <br> Online Degree Search Title: English Literature (PhD) <br> Campus: TEMPE

Program Description: This Ph.D. program in literature promotes the study of the production, distribution and reception of texts; of their linguistic, rhetorical and literary structures and functions; and of internal and external forces shaping literature. Faculty members often incorporate diverse modes of inquiry (including both traditional and recent critical approaches to literary studies) into course content and methodology allowing students the flexibility to pursue work in specific periods, critical theory, cultural studies, race, class and gender, and provide a mechanism to juxtapose high and low cultural texts and/or canonical and newly emerging texts. The program prepares students for entrance into the profession as both teachers and scholars.

Degree Requirements: 84 credit hours a Foreign Language Exam a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
The Ph.D. program requires:

- A dissertation.
- Eighty-four credit hours.
- A foreign language requirement.
- A written or oral examination. See for details: http://english.clas.asu.edu/gradstudies-exam.

A student with an appropriate master's degree must complete a minimum of 54 credit hours of approved graduate work, which includes 12 credit hours of dissertation, provided the student's master's degree is accepted by the supervisory committee and the academic unit. Research hours may be used towards course work in consultation with the advisor. A student without an appropriate master's degree must complete 84 credit hours of work at ASU. At the advisor's discretion, students may include up to 12 credit hours of appropriate, graduate-level course work undertaken at another university, and not previously counted towards any other degree.
Specifically required are six credit hours in theory courses and ENG 500 Research Methods. Students must complete (or have completed at the master's level or its equivalent) one graduate course in eight of the following 10 categories:

- Cultural studies.
- Ethnic studies.
- Gender studies.
- Genre.
- History/structure of the English language.
- Literature 1500-1660.
- Literature 1660-1900.
- Literature since 1900.
- Literature to 1500.
- Postcolonial/Anglophone literatures.

Students must take at least five graduate seminars at the 600 level en route to the Ph.D. degree, at least three of which must be taken in the Ph.D. program. Up to 12 credit hours taken outside the department may be counted toward the degree. Students should consult with their supervisory committees when choosing electives.

Admission Requirements: Applicants must submit a Graduate College online application.
Applicants for the Ph.D. degree in English (literature) must also submit:

- An academic writing sample.
- Curriculum vitae.
- GRE general scores (subject scores are optional).
- A statement of purpose.
- Three letters of recommendation.

Deadline for admission applications and requests for financial aid, including teaching assistantships, is Jan. 15. Incomplete files are not considered.

## Contact Information:

Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/graduate
LL 543B
enggrad@asu.edu
480-965-3194

## English (Rhetoric, Composition and Linguistics), PHD (LAENRHTPHD)

Online Degree Search Title: Rhetoric/Composition/Linguistics (PhD)
Campus: TEMPE
Program Description: The Ph.D. in English with a concentration in rhetoric, composition, and linguistics promotes the study of the production, distribution and interpretation of oral and written texts. It focuses on rhetorical and linguistic structures and functions within the texts and on the internal and external factors involved in the creation of these texts. Requirements are designed to
encourage a full understanding of theoretical and applied aspects of both rhetoric/composition and linguistics and their intersection. Flexibility in requirements makes it possible for students to pursue those aspects of the disciplines which interest them the most. Courses explore both historical and current theoretical approaches. The program prepares students for entrance into the field as teachers, scholars and professionals.

Degree Requirements: 84 credit hours a Foreign Language Exam a Written Comprehensive Exam a Prospectus and a Dissertation or 84 credit hours a Foreign Language Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The Ph.D. program requires:

- A dissertation.
- Eighty-four credit hours.
- A foreign language requirement.
- A written or oral examination, see http://english.clas.asu.edu/gradstudies-exam for details.

In general, a student with an appropriate master's degree must complete a minimum of 54 credit hours of approved graduate work, which includes 12 credit hours of dissertation. Research hours may be used towards course work in consultation with the advisor. A student without an appropriate master's degree usually must complete 84 credit hours of work at ASU. At the advisor's discretion, students may include up to 12 credit hours of appropriate, graduate-level course work undertaken at another university and not previously counted toward any other degree.
Course Work Requirements
Research Methods (3): Students must take ENG/LIN 500 or its equivalent.
Foundational Distribution (12): Foundational courses are offered at the 500 level, but also may include courses completed as masters' level work at other universities. Students must complete at the 500 level (or equivalent):

- One course in composition studies.
- One course in rhetoric.
- Two courses in linguistics.

Advanced Studies Distribution (12): Advanced studies courses are offered at the 600 level or above. Students may choose to take 600-level courses required by the distribution from one area of study (rhetoric, composition or linguistics) or a combination of areas in which they would like to concentrate. It is assumed that a student will have taken a foundational level course, prior to taking an advanced studies course, especially when the area of study is new for the student.
Continuing Concentration: Students may choose to take other foundational ( 500 or equivalent) and advanced ( 600 and above or equivalent) courses in any one of the areas of concentration or a combination of areas in which they would like to concentrate. Students should consult with an advisor when selecting additional courses for concentration. It is expected that some of these continuing courses will include ENG or LIN 790 and 792's used in preparation for the doctoral examination.
Note: Special topic courses (ENG 598, LIN 548, LIN 598) and seminars (ENG 591, LIN 591) may fulfill some of the distribution requirements at the foundational (500-level) and advanced studies ( $600-l e v e l$ ) levels. Students should consult with an advisor when choosing these courses.
Interdisciplinary Option (up to 12): Students are encouraged to take up to 12 hours of courses outside the department to count toward the degree. Those courses may fulfill some of the foregoing requirements at the foundational and advanced studies distribution, or be taken in addition to those required by the distribution. Students should consult with an advisor when choosing these courses.
Dissertation: Students must include 12 (and only 12) credit hours of 799 on the doctoral program of study.

Admission Requirements: Applicants must submit a Graduate College online application.
Supporting documents include:

- An academic writing sample.
- A curriculum vitae.
- GRE general scores.
- Official transcripts.
- A statement of purpose.
- Three letters of recommendation.

Deadline for admission applications and teaching assistantships, is Jan. 15. Incomplete files are not considered.

## Contact Information:

Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/

## Environmental Life Sciences, PHD (LAELSPHD)

Online Degree Search Title: Environmental Life Sciences (PHD)
Campus: TEMPE
Program Description: Environmental life sciences is a novel graduate degree that will provide Ph.D.-level training in several complementary fields focused on interactions between organisms (e.g., plant, animal or microbe) and their environment. The program will provide transdisciplinary training that includes aspects of:

- Biology.
- Chemistry/biochemistry.
- Environmental engineering.
- Geosciences.
- Mathematics.
- Social sciences.
- Sustainability.

Graduate students will be trained in:

- Core classes.
- Seminars.
- Reading groups.
- Research clusters.

A focus will be collaborative and integrative study of the effects of environmental variation on fluxes of materials and energy across scales ranging from the organism to the globe. Our overall goal is to provide a unique Ph.D. program that produces students with a broad appreciation of environment-organism questions in the context of natural and anthropogenic environmental change.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
As specified in each student's plan of study, the total number of credit hours should consist of:

- Seven credit hours of core courses.
- A minimum of nine hours of electives.
- Twelve hours of dissertation credit (ELS 799).

Beyond these 28 credit hours, the remaining credit hours should be filled either from electives or from the ELS omnibus courses up to the required number of total credit hours ( 54 if entering with a master's degree or 84 with a bachelor's).

Admission Requirements: Applicants must possess a minimum of a bachelor's degree (or equivalent) or a graduate degree from a regionally accredited college or university or of recognized standing in a related field. They must have had a minimum of a 3.00 cumulative GPA ( 4.00 scale) in the last 60 hours of their first bachelor's degree. All applicants must submit GRE results.

## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://els.asu.edu/
LSE 421
sols.grad@asu.edu
480-965-1768

## Environmental Social Science, PHD (LAESSPHD) <br> Online Degree Search Title: Environmental Social Science (PhD) <br> Campus: TEMPE

Program Description: The Ph.D. in environmental social science (ESS) is one of the few doctoral programs in the U.S. that draws on the premise that reducing human impacts and developing more sustainable environmental practices will be difficult, if not impossible, to achieve without a focus on the social dynamics of environmental issues using critical social science perspectives.

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The program is organized around theoretically based conceptual domains:

- Culture and the environment.
- Environmental hazards and vulnerability.
- Environmental justice.
- Human environment impacts.
- Political ecology.
- Science and technology studies.

These are the basis for addressing various topical foci, including urban environments, technologies and their consequences, landscapes, institutions and health and the environment.
Students will work with faculty who have expertise in a broad range of fields including:

- Archaeology.
- Community resources.
- Cultural and medical anthropology.
- Demography.
- Environmental history.
- Geographic information systems.
- Human and physical geography.
- Planning.
- Public affairs.
- Science and technology studies.
- Sociology.

The ESS program will train students to move into teaching and research positions, or to assume leadership roles in:

- Government.
- Industry.
- Nongovernmental organizations (NGOs).

Course work for the degree is focused on developing real-world skills and a solid grasp of complex social science approaches to environmental issues. Students work closely with their committee to develop a curriculum appropriate to their chosen interests and career goals.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The Ph.D. program consists of:

- A dissertation.
- Eighty-four hours of course work post-bachelor's.
- Fifty-four hours ( 30 course work, 12 research, and 12 dissertation hours) post-master's.
- A written comprehensive examination and the oral defense of a doctoral proposal/prospectus.

Students entering with an M.A. in a related field may be granted up to 30 credit hours toward the 84 hour total required for the Ph.D. Students must maintain a "B-" (3.20) average GPA in their courses and complete degree requirements per the program's satisfactory progress policy. Students without an M.A. must earn an additional 30 hours of graduate credit, selecting courses from a number of appropriate programs on campus.
All students entering the program complete 18 hours of core classes in conceptual domains and topical foci. Additional hours come from courses in research design, technical expertise and electives. Students may select from a substantial range of courses to satisfy noncore requirements.

Admission Requirements: All applicants must submit a Graduate College online application. In addition to general requirements for admission to the Graduate College, the environmental social science Ph.D. program requires students to provide:

- A current curriculum vitae or resume.
- Official GRE scores.
- An optional sample of their written work.
- A statement of purpose outlining career and educational goals.
- Three letters of recommendation.
- Transcripts of all undergraduate and graduate coursework.

While undergraduate work in one of the social sciences (e.g., geography, political science, sociology, anthropology, planning or history) is not required, some course work in the social sciences is advantageous for admission. Students may be admitted without
such a background and may be required to acquire knowledge of the social sciences in a manner to be specified at the time of admission.

## Contact Information:

Liberal Arts and Sciences, College of
School of Human Evolution \& Social Change
http://shesc.asu.edu/graduate_studies
SHESC 233
shescgrad@asu.edu
480-965-6215

## Environmental Social Science (Urbanism), PHD (LAESSURPHD)

Online Degree Search Title: Environmental Social Science (Urbanism) PHD
Campus: TEMPE

Program Description: The doctor of philosophy in environmental social science is one of the few doctoral programs in the U.S. that focus on the social dynamics of environmental issues using critical social science perspectives which are a vital component of reducing human impacts and developing more sustainable environmental practices.
The program is organized around theoretically based conceptual domains:

- Culture and the environment.
- Environmental justice.
- Environmental hazards and vulnerability.
- Human environment impacts.
- Political ecology.
- Science and technology studies.

These are the basis for addressing various topical foci, including urban environments, technologies and their consequences, landscapes, institutions and health and the environment.
The concentration in urbanism will leverage the varied interests in urbanism and help emerging scholars as they attempt to compare, contrast and take stock of urbanism. Working with faculty from across a range of departments and programs at ASU, doctoral students will be able to capture the creative tensions that scholarship on urbanism has inspired in order to stimulate a provocative, constructive kind of inquiry. Academic units the students might engage with to fulfill the requirements of the urbanism concentration include:

- Herberger Institute for Design and the Arts.
- School of Community Resources and Development.
- School of Geographical Sciences and Urban Planning.
- School of Politics and Global Studies.
- School of Historical, Philosophical and Religious Studies.
- School of Human Evolution and Social Change.
- School of Sustainability.

The environmental social science program will train students to move into teaching and research positions, or to assume leadership roles in:

- Government.
- Industry.
- Nongovernmental organizations.

Course work for the degree is focused on developing real-world skills and a solid grasp of complex social science approaches to environmental issues. Students work closely with their committee to develop a curriculum appropriate to their chosen interests and career goals.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
The Ph.D. program consists of:

- A dissertation.
- Eighty-four hours of course work post-bachelor's.
- Fifty-four hours ( 30 course work, 12 research, and 12 dissertation hours) post-master's.
- A written comprehensive examination and the oral defense of a doctoral proposal/prospectus.

Students entering with an M.A. in a related field may be granted up to 30 credit hours toward the 84 hour total required for the Ph.D. Students must maintain a "B-" (3.20) average GPA in their courses and complete degree requirements per the program's satisfactory progress policy. Students without an M.A. must earn an additional 30 hours of graduate credit, selecting courses from a number of appropriate programs on campus.
All students entering the program complete 18 hours of core classes in conceptual domains and topical foci. For the concentration in urbanism, 15 credit hours will be selected from an approved list of applicable courses related to urbanism. Some of the environmental social science core courses also count toward the concentration in urbanism. These courses will include the core urbanism course, GCU 516, as well as one course from each of the four urbanism clusters:

- Built form.
- Culture and society.
- Natural environment.
- Institutions and governance.

Additional hours come from courses in research design, technical expertise, and electives. Students may select from a substantial range of courses to satisfy noncore requirements.

Admission Requirements: In addition to general requirements for admission to the Graduate College, the environmental social science doctoral program requires students to provide:

- A current curriculum vitae or resume.
- Official GRE scores.
- An optional sample of their written work.
- A statement of purpose outlining career and educational goals.
- Three letters of recommendation.
- Transcripts of all undergraduate and graduate course work.

While undergraduate work in one of the social sciences (e.g., geography, political science, sociology, anthropology, planning or history) is not required, some course work in the social sciences is advantageous for admission. Students may be admitted without such a background and may be required to acquire knowledge of the social sciences in a manner to be specified at the time of admission.

## Contact Information:

Liberal Arts and Sciences, College of School of Human Evolution \& Social Change
http://shesc.asu.edu/graduate_studies
SHESC 233
shescgrad@asu.edu
480-965-6215

## Evolutionary Biology, PHD (LAEVOPHD)

Online Degree Search Title: Evolutionary Biology, PhD
Campus: TEMPE

Program Description: Evolutionary biology is an interdisciplinary graduate degree program that will provide Ph.D.-level training in the historical, conceptual, empirical and quantitative aspects of biological evolution. Evolution cuts across the biological sciences in ways that few other foci do, it:

- Allows integration of information and patterns across levels of organization.
- Informs the theoretical foundations of subfields ranging from population genetics to systematics to ecosystem ecology.
- Provides bridges between temporal and spatial scales.

Forgoing emphases on particular taxa or methods, the program focuses on understanding the patterns and processes that have and continue to shape life on Earth, training the next generation of scientists to use this knowledge to meet present and future challenges to the biosphere and human health in the face of increasing environmental perturbation.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

- Core Requirements (9).
- EVO 601 Principles of Evolution (3)
- EVO 610 Research Areas of Evolution (2)
- BIO 614 Biometry (4)
- Elective Courses (9), the department and the student's advisor will determine these courses in conjunction with the student.
- Research, course work, and/or 30 credit hours from a previously awarded master's degree (54).
- Dissertation (12).


## Admission Requirements:

- All applicants will submit the Graduate College online application.
- The applicant must have a baccalaureate degree from a regionally accredited institution in the U.S. or an international equivalent degree.
- A minimum GPA of 3.00 ( 4.00 scale) must have been earned in the student's last 60 hours of their bachelor's program.
- The GRE is required.
- All applicants from countries whose native language is other than English must meet English proficiency requirements.


## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad/evo_bio.php
LSA 260
msr@asu.edu
480-965-1578

## Exploration Systems Design, PHD (LAESDPHD)

Online Degree Search Title: Exploration Systems Design (PhD)
Campus: TEMPE

Program Description: The Ph.D. in exploration systems design offers students an advanced systems approach for developing scientific exploration technologies in a wide range of demanding environments on the Earth, planets, moons and space. This transdisciplinary degree program provides a unique platform to train systems engineers targeting technological development for exploration science. This collaborative program between the School of Earth and Space Exploration (SESE) and the Fulton Schools of Engineering allows students to specialize in topics related to planetary exploration, astronomical instrumentation, robotics, sensors and sensor networks. The curriculum will integrate SESE's science, instrumentation and systems engineering core courses with related coursework from the Fulton Schools of Engineering. Students must select a concentration as part of this degree program. Concentrations are available in instrumentation, systems engineering or sensor networks.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The exploration systems design doctorate degree requires:

- Six credit hours of core courses.
- Nine credit hours of course work specific to the concentration.
- 12 credit hours of SES 799 Dissertation.


## Admission Requirements:

- Minimum of a bachelor's degree (or equivalent) or a graduate degree from a regionally accredited college or university of recognized standing in a related field such as engineering, computer science, geological sciences or physics is required.
- Minimum of a 3.00 cumulative GPA (scale is $4.00=A$ ) in the last 60 hours of a student's bachelor's degree program.
- General GRE.

Applications for fall admission are due by Jan. 15 of the same year. Applications for spring admission are due by Oct. 1 of the previous year.
Instrumentation Concentration:
An undergraduate degree in electrical engineering, aerospace engineering, or mechanical engineering is preferred.
Systems Engineering Concentration:
Successful completion of a senior capstone/design project is an admissions requirement for this concentration. For students who have not had a design course, they are required to take SES 405 Systems Engineering as a deficiency course.
Sensor Networks Concentration:
An undergraduate degree in electrical engineering or computer science is preferred.

## Contact Information:

Liberal Arts and Sciences, College of

School of Earth and Space Exploration
http://sese.asu.edu
PSF 686
bdial@asu.edu
480-965-2213

## Exploration Systems Design (Instrumentation), PHD (LAESDIPHD) <br> Online Degree Search Title: Exploration Systems Design (Instrumentation) <br> Campus: TEMPE

Program Description: The Ph.D. in exploration systems design offers students an advanced systems approach for developing scientific exploration technologies in a wide range of demanding environments on the Earth, planets, moons and space. This transdisciplinary degree program provides a unique platform to train systems engineers targeting technological development for exploration science. This collaborative program between the School of Earth and Space Exploration (SESE) and the Ira A. Fulton Schools of Engineering allows students to specialize in topics related to planetary exploration, astronomical instrumentation, robotics, sensors and sensor networks. The curriculum will integrate SESE's science, instrumentation and systems engineering core courses with related coursework from the Ira A. Fulton Schools of Engineering. Students must select a concentration as part of this degree program. Concentrations are available in instrumentation, systems engineering or sensor networks.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
The exploration systems design doctorate degree requires:

- Six credit hours of core courses.
- Nine credit hours of course work specific to the concentration.
- 12 credit hours of SES 799 Dissertation.


## Admission Requirements:

- Minimum of a bachelor's degree (or equivalent) or a graduate degree from a regionally accredited college or university of recognized standing in a related field such as engineering, computer science, geological sciences or physics is required.
- Minimum of a 3.00 cumulative GPA (scale is $4.00=A$ ) in the last 60 hours of a student's bachelor's degree program.
- General GRE.

Applications for fall admission are due by Jan. 15 of the same year. Applications for spring admission are due by Oct. 1 of the previous year.
Instrumentation Concentration:
An undergraduate degree in electrical engineering, aerospace engineering, or mechanical engineering is preferred.
Systems Engineering Concentration:
Successful completion of a senior capstone/design project is an admissions requirement for this concentration. For students who have not had a design course, they are required to take SES 405 Systems Engineering as a deficiency course.
Sensor Networks Concentration:
An undergraduate degree in electrical engineering or computer science is preferred.

## Contact Information:

Liberal Arts and Sciences, College of
School of Earth and Space Exploration
http://sese.asu.edu
PSF 686
bdial@asu.edu
480-965-2213

## Exploration Systems Design (Sensor Networks), PHD (LAESDSNPHD) <br> Online Degree Search Title: Exploration Systems Design (Sensor Networks) <br> Campus: TEMPE

Program Description: The Ph.D. in exploration systems design offers students an advanced systems approach for developing scientific exploration technologies in a wide range of demanding environments on the Earth, planets, moons and space. This transdisciplinary degree program provides a unique platform to train systems engineers targeting technological development for exploration science. This collaborative program between the School of Earth and Space Exploration (SESE) and the Fulton Schools of

Engineering allows students to specialize in topics related to planetary exploration, astronomical instrumentation, robotics, sensors and sensor networks. The curriculum will integrate SESE's science, instrumentation and systems engineering core courses with related coursework from the Fulton Schools of Engineering. Students must select a concentration as part of this degree program. Concentrations are available in instrumentation, systems engineering or sensor networks.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The exploration systems design doctorate degree requires:

- Six credit hours of core courses.
- Nine credit hours of course work specific to the concentration.
- 12 credit hours of SES 799 Dissertation.


## Admission Requirements:

- Minimum of a bachelor's degree (or equivalent) or a graduate degree from a regionally accredited college or university of recognized standing in a related field such as engineering, computer science, geological sciences or physics is required.
- Minimum of a 3.00 cumulative GPA (scale is $4.00=\mathrm{A}$ ) in the last 60 hours of a student's bachelor's degree program.
- General GRE.

Applications for fall admission are due by Jan. 15 of the same year. Applications for spring admission are due by Oct. 1 of the previous year.
Instrumentation Concentration:
An undergraduate degree in electrical engineering, aerospace engineering, or mechanical engineering is preferred.
Systems Engineering Concentration:
Successful completion of a senior capstone/design project is an admissions requirement for this concentration. For students who have not had a design course, they are required to take SES 405 Systems Engineering as a deficiency course.
Sensor Networks Concentration:
An undergraduate degree in electrical engineering or computer science is preferred.

## Contact Information:

Liberal Arts and Sciences, College of
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480-965-2213

## Exploration Systems Design (Systems Engineering), PHD (LAESDSEPHD)

Online Degree Search Title: Exploration Systems Design (Systems Engineering)
Campus: TEMPE

Program Description: The Ph.D. in exploration systems design offers students an advanced systems approach for developing scientific exploration technologies in a wide range of demanding environments on the Earth, planets, moons and space. This transdisciplinary degree program provides a unique platform to train systems engineers targeting technological development for exploration science. This collaborative program between the School of Earth and Space Exploration (SESE) and the Fulton Schools of Engineering allows students to specialize in topics related to planetary exploration, astronomical instrumentation, robotics, sensors and sensor networks. The curriculum will integrate SESE's science, instrumentation and systems engineering core courses with related coursework from the Fulton Schools of Engineering. Students must select a concentration as part of this degree program. Concentrations are available in instrumentation, systems engineering or sensor networks.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The exploration systems design doctorate degree requires:

- Six credit hours of core courses.
- Nine credit hours of course work specific to the concentration.
- 12 credit hours of SES 799 Dissertation.


## Admission Requirements:

- Minimum of a bachelor's degree (or equivalent) or a graduate degree from a regionally accredited college or university of recognized standing in a related field such as engineering, computer science, geological sciences or physics is required.
- Minimum of a 3.00 cumulative GPA (scale is $4.00=A$ ) in the last 60 hours of a student's bachelor's degree program.
- General GRE.

Applications for fall admission are due by Jan. 15 of the same year. Applications for spring admission are due by Oct. 1 of the previous year.
Instrumentation Concentration:
An undergraduate degree in electrical engineering, aerospace engineering, or mechanical engineering is preferred.
Systems Engineering Concentration:
Successful completion of a senior capstone/design project is an admissions requirement for this concentration. For students who have not had a design course, they are required to take SES 405 Systems Engineering as a deficiency course.
Sensor Networks Concentration:
An undergraduate degree in electrical engineering or computer science is preferred.

## Contact Information:

Liberal Arts and Sciences, College of
School of Earth and Space Exploration
PSF 686
bdial@asu.edu
480-965-2213

## Family and Human Development, MS (LAFAMHDMS)

Online Degree Search Title: Family and Human Development (MS)
Campus: TEMPE
Program Description: The program in family and human development is devoted to the study of families, children and youth. The program's research, teaching and service have direct meaning for the lives of children and adults and the families and communities in which they live.
The faculty share a common commitment to high-quality research that both increases the basic understanding of human and family development and has the potential to contribute to the improvement of the lives of children and families.

Degree Requirements: 31 credit hours and a Thesis or 34 credit hours and a Thesis (MIP)
Courses are selected by the student along guidelines of the specific areas, after consultation with the supervisory committee. The plan of study should be completed and approved by the supervisory committee once completing 50 percent of the minimum required credit hours for the degree. A minimum of 31 credit hours is required. Acceptance of the proposed plan of study must be verified by signature of the chair and supervisory committee members. After approval within the program or college, the plan of study is submitted to the Graduate College for final approval.
The following requirements must be met for the tracks in child development or family studies. All students must take the following courses (or equivalent with the approval of the graduate committee):

CDE 531 Theoretical Issues in Child Development
CDE 534 Risk and Resiliency
FAS 500 Research Methods
FAS 531 Theoretical Issues in Family Sciences
PSY 530 Intermediate Statistics

## Child Development

The required courses are 1) CDE 533, and 2) six credit hours of CDE elective selected (with approval of the student's advisor). Six credit hours of thesis work are also required.
Family Relationships
The required courses are 1) FAS 539, and 2) six credit hours of FAS electives (selected with approval of the student's advisor). Six credit hours of thesis work are also required.

Admission Requirements: Admission to the M.S. in family and human development program is determined by the following criteria:

- Application to the Graduate College.
- Official transcripts of all undergraduate and graduate course work.
- A resume or curriculum vitae.
- Statement of goals relevant to the M.S. program.
- A Test of English as a Foreign Language (TOEFL) score of at least 600 is required of all applicants whose native language is not English.
- Three letters of recommendation.
- Verbal, quantitative and analytical GRE scores.

Applications, which are due Jan. 15, should be completed online by submitting the Graduate College's online application. Letters of recommendation should be sent to:
Graduate Secretary
Family and Human Development
P.O. Box 873701

Arizona State University
Tempe, AZ 85287-3701

## Contact Information:

Liberal Arts and Sciences, College of
School of Social and Family Dynamics
http://ssfd.clas.asu.edu/fhdms
SS 144
email@ssfd.info
480-965-6978

## Family and Human Development, PHD (LAFAMSCPHD)

Online Degree Search Title: Family and Human Development (PhD) Campus: TEMPE

Program Description: The program in family and human development is devoted to the study of families, children and youth. The program's research, teaching and service have direct meaning for the lives of children and adults and the families and communities in which they live.
The faculty share a common commitment to high-quality research that both increases the basic understanding of human and family development and has the potential to contribute to the improvement of the lives of children and families.

Degree Requirements: 85 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
Each student must prepare and submit a plan of study in conjunction with the chair and members of his or her supervisory committee once completing 50 percent of the minimum required credit hours for the degree. The plan of study consists of a minimum of:

- Eighty-five credit hours for students entering after the bachelor's degree.
- Of the 85 credit hours for a postbaccalaureate program, six hours are thesis and 12 hours are dissertation credit.
- Postbaccalaureate students complete a master's-in-passing before advancing to their doctoral studies.
- Fifty-five credit hours for students entering after the master's degree.
- Of the 55 credit hours of the post-master's program, there are 12 credit hours of dissertation.
- The additional hours in both the postbaccalaureate and post-master's tracks involve courses in:
- Electives relating to family and human development.
- Family and human development.
- Statistics and research methods.

Admission Requirements: Admission to the Ph.D. in family and human development is determined by the following criteria:

- Application to the Graduate College.
- Official transcripts of all undergraduate and graduate course work.
- A resume or curriculum vitae.
- Statement of goals relevant to the Ph.D. program.
- Three letters of recommendation.
- Verbal, quantitative, and analytical GRE scores.

A Test of English as a Foreign Language (TOEFL) score of at least 600 is required of all applicants whose native language is not English.
Applications, which are due Jan. 15, should be completed online via the Graduate College.
Letters of recommendation should be sent to:

Graduate Secretary
Family and Human Development
P.O. Box 873701

Arizona State University
Tempe, AZ 85287-3701

## Contact Information:

Liberal Arts and Sciences, College of
School of Social and Family Dynamics
http://ssfd.clas.asu.edu/fhdphd
SS 144
email@ssfd.info
480-965-6978

## French (Comparative Literature), MA (LAFRECLMA)

Online Degree Search Title: French Comparative Literature (MA)
Campus: TEMPE
Program Description: The faculty in the School of International Letters and Cultures offer a graduate program leading to the M.A. in French with a concentration in comparative literature.

Degree Requirements: 30 credit hours a Thesis and a Written Comprehensive Exam or 30 credit hours including the required course (FRE 593) an Applied Project and a Written Comprehensive Exam

Graduate students may take only 500 -level courses for graduate credit. At least nine hours must be selected from those courses listed exclusively for graduate students. The program must include:

- FRE 500 Bibliography and Research Methods (it is recommended that the candidate enroll in this course as early as possible).
- Two courses in linguistics, civilization or translation (of which one must be in linguistics).
- One course in critical or cultural theory.

For core courses, a minimum of four courses offered by the French section must be selected from any combination of the following categories:

- Francophone studies courses.
- Genre courses.
- Period courses.

When approved by the graduate committee, up to six hours of related course work may be taken outside of French.
A student must achieve a GPA of "B" (3.00) or higher in all work specifically included in the plan of study. Grades below a "C" (2.00) cannot be used to meet the requirements of a graduate degree. No student may accumulate more than one incomplete at any one time.
Independent study courses will be given only under exceptional circumstances and will not duplicate courses which are available. The French graduate committee is responsible for authorizing such work in cooperation with the individual professor. No more than six hours of independent study will be permitted.
The student must write a thesis dealing with a clearly defined literary topic bearing some relation to work done in the student's classes. Students planning to teach at the secondary school level may choose to complete an applied project.
The written examination for the concentration in comparative literature will be administered by the interdepartmental committee for comparative literature and will consist of two essay-based components: 1) general concepts of comparative literature, and 2) problems of comparative literature.

Admission Requirements: All applicants must submit the Graduate College online application. Candidates for the M.A. should, upon entrance, present the equivalent of an undergraduate major in the language in which the degree is sought. Those who lack this background but who show strong potential and meet Graduate College admissions requirements may be admitted to a graduate program on a provisional basis, pending removal of specified deficiencies. These deficiencies must be completed in addition to the regular program of study for the master's degree.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/graduate
LL 440
silc@asu.edu
480-965-6281

## French (Linguistics), MA (LAFRELINMA)

Online Degree Search Title: French Linguistics (MA)
Campus: TEMPE
Program Description: The School of International Letters and Cultures offers a graduate program in French leading to the degree of M.A. French with concentrations in literature, linguistics or comparative literature. There is also an M.A. program in secondary education with a major in French.

Degree Requirements: 30 credit hours a Thesis and a Written Comprehensive Exam or 30 credit hours including the required course (FRE 593) an Applied Project and a Written Comprehensive Exam
The plan of study for the M.A. includes:

- A thesis or applied project option.
- A minimum of 30 credit hours of graduate-level work, as approved by the candidate's supervisory committee.
- The program must include a 500-level bibliography and research methods course offered by the department.
- When approved by the candidate's supervisory committee, in some programs, nine hours in another language or in closely related courses may be included in the program.

Comprehensive Examination: All candidates are required to pass a comprehensive written examination designed to evaluate the candidate's knowledge in the area of specialization. A reading list, as agreed upon, serves as a guide to prepare for this examination.

Admission Requirements: Applicants must submit the Graduate College online application. Candidates for the M.A. should, upon entrance, present the equivalent of an undergraduate major in the language in which the degree is sought. Those who lack this background but who show strong potential and meet Graduate College admissions requirements may be admitted to a graduate program on a provisional basis, pending removal of specified deficiencies. These deficiencies must be completed in addition to the regular program of study for the master's degree.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/graduate
LL 440
silc@asu.edu
480-965-6281

## French (Literature), MA (LAFRELITMA)

Online Degree Search Title: French Literature (MA)
Campus: TEMPE
Program Description: The School of International Letters and Cultures offers a graduate program in French leading to the degree of M.A. French with concentrations in literature, linguistics or comparative literature. There is also an M.A. program in secondary education with a major in French.

Degree Requirements: 30 credit hours a Thesis and a Written Comprehensive Exam or 30 credit hours including the required course (FRE 593) an Applied Project and a Written Comprehensive Exam The plan of study for the M.A. includes:

- A thesis or applied project option.
- A minimum of 30 credit hours of graduate-level work, as approved by the candidate's supervisory committee.
- The program must include a 500-level bibliography and research methods course offered by the department.
- When approved by the candidate's supervisory committee, in some programs, nine hours in another language or in closely related courses may be included in the program.

Comprehensive Examination: All candidates are required to pass a comprehensive written examination designed to evaluate the candidate's knowledge in the area of specialization. A reading list, as agreed upon, serves as a guide to prepare for this examination.

Admission Requirements: All applicants must submit the Graduate College online application. Candidates for the M.A. should, upon entrance, present the equivalent of an undergraduate major in the language in which the degree is sought. Those who lack this background but who show strong potential and meet Graduate College admissions requirements may be admitted to a graduate program on a provisional basis, pending removal of specified deficiencies. These deficiencies must be completed in addition to the regular program of study for the master's degree.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/graduate
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480-965-6281

## Gender Studies, PHD (LAGSTPHD)

Online Degree Search Title: Gender Studies (PhD)
Campus: TEMPE
Program Description: The academic study of gender is increasingly recognized as central across academic fields, from literature to psychology to biology and law. The goal of the doctoral program is to train researchers who can take their place in the world as:

- Academic faculty.
- Policy-makers.
- Researchers inside and outside of academia.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The gender studies program requires:

- Eighty-four credit hours for students admitted with only a bachelor's degree.
- A dissertation.
- Both a written and oral comprehensive examination.

The gender studies Ph.D. program is designed to provide students with the interdisciplinary training in theory and methods needed to conduct original research and scholarship about gender. At the core of the program are four required courses:

WST 601 Critical Concepts of Gender
WST 602 Mapping the Intersections of Gender
WST 603 Engendering Methodology
WST 701 Research Design and Proposal Development in Gender Studies
Students also take two research methods courses relevant to their dissertation plus additional courses in at least one of three areas of specialization:
Health, science and technology
Courses in this area explore the impact of gender on:

- Health care.
- Health occupations.
- Science and technology.

We have faculty expertise in:

- Bioethics.
- Gender and technology.
- Health and sexuality.
- HIV/AIDS prevention.
- The participation of women in math and science in the developing world.
- Women's roles as healers and caregivers.

Visual and narrative culture
Courses in this area explore historical and contemporary representations of gender in all genres, including:

- Art.
- Literature.
- Popular culture.
- Scientific, medical, historical and legal discourse.
- Theater.

Our faculty focus especially on the intersections of gender representations with representations of race, sexuality, class and the ways in which representations produce rather than simply mimic gender inequality and polarized identities.
Gender, justice and social change
Courses in this area explore the gender dimension of social structures, institutions and organizations; the processes of social change and community development; and the ways policies and laws can change gender relations. We have faculty expertise in:

- Child welfare.
- Development.
- Domestic violence.
- Environment.
- Globalization.
- Immigration.
- Social policy.
- Sustainability.
- Transnational feminisms.
- Work.

Admission Requirements: The women and gender studies program welcomes applications from qualified students without regard to race, creed, color, religion, sex or national origin.
Submit to the Graduate College:

- Application for graduate research/teaching assistantship form http://graduate.asu.edu/forms.
- Online Graduate College application.
- Non-refundable application fee as specified by the Graduate College.
- Official copies of all undergraduate and graduate transcripts.
- Official GRE scores. Testing scores cannot be more than five years old.
- Resume or curriculum vitae.
- Statement of purpose.
- Students whose native language is not English must meet ASU's English proficiency requirements
http://graduate.asu.edu/admissions/international.
- Three letters of reference preferably from faculty or other researchers.
- Writing sample (10-25 pages).

Submit to the Women and Gender Studies Program an application for graduate research/teaching assistantship form:
http://graduate.asu.edu/forms.
Mail to:
Graduate College
Arizona State University
P.O. Box 871003

Tempe, AZ 85287-1003
For additional financial information, consult the Financial Aid office at http://students.asu.edu/financialaid.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://wgs.asu.edu
WHALL 205
wgs.asutempe@asu.edu
480-965-2358

## Gender Studies (certificate), CERT (LAWSTGRCT)

Online Degree Search Title: Gender Studies (Grad Certificate)
Campus: TEMPE

Program Description: The academic study of gender is increasingly recognized as central across academic fields, from literature to psychology, to biology and law. The graduate certificate in gender studies offers graduate students the opportunity to enhance their advanced degrees with demonstrated proficiency and knowledge about gender research and theories that they may apply in their own fields.

Degree Requirements: 15 credit hours
Students are required to complete:
Two required courses (6)
WST 601 Critical Concepts in Gender
WST 602 Mapping the Intersectionalities of Gender
Three additional courses (9)
Courses may be chosen from other WST graduate courses or from more than thirty approved courses from other departments throughout the university. Other courses may also be used with the graduate director's approval. Up to 6 credits not used for another ASU degree or certificate can be transferred, with graduate director's approval, from another university. Courses should be recorded on the transfer section of the student's Interactive Program of Study (iPOS). Up to nine credit hours of ASU non-degree credit can be transferred for students who are eventually admitted to an ASU graduate program.

Admission Requirements: Applicants must submit an online Graduate College application.
Contact Lisa Anderson (Imanderson@asu.edu), director of graduate studies, Women and Gender Studies Program, or go to http://wgs.asu.edu/grad-certificate for more information about the certificate and to design course work.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://wgs.asu.edu/
WHALL 205
wgs.asutempe@asu.edu
480-965-2358

## Geographic Education, MAS (LAGEOEDMAS)

Online Degree Search Title: Geographic Education (MAS)
Campus: ONLNE, TEMPE
Program Description: The M.A.S. in geographic education is an online nonthesis degree program that provides teachers with the opportunity to obtain a highly qualified status in geographic education. The degree program is intended for K-12 teachers and is appropriate for elementary and secondary school teachers. Although the courses are completed online, there are two in-person meetings, including an orientation and a graduation event, where capstone projects are presented.

Degree Requirements: 30 Credit hours and an Applied Project
The M.A.S. in geographic education program consists of:

- A sample plan of study for a full-time student is located at http://geoplan.asu.edu/masge-sampleprogram.
- Students complete 24 credit hours in geography, a three-credit-hour course in educational research (COE 501 Introduction to Research and Evaluation in Education) and a three-credit-hour course on the applied project related to geographic education (SED 593 Applied Project or DCI 593 Applied Project). This culminating experience is required in place of a thesis.
- Students are required to have access to a computer with an internet connection and the capability to view video and animated files with sound, access to e-mail and access to a word processing program.
- Thirty credit hours taken completely online, with two one-day sessions required at the Tempe campus for an orientation session and presentation of an applied project.

Admission Requirements: All applicants must submit a Graduate College application. In addition to the Graduate College admission requirements, prospective students must have a bachelor's degree from a regionally accredited institution (or equivalent) in education, geography or related area with a minimum GPA of 3.00 ( 4.00 scale) or demonstrate a minimum of one year of related professional experience and successful completion of a bachelor's degree from a regionally accredited institution (or equivalent) with a minimum GPA of 3.00 ( 4.00 scale). Applicants with a GPA below 3.00 can apply and may be accepted if they show substantial promise of success based on the candidate's statement and letters of recommendation. Applicants to the degree program are accepted year-round for fall admission.

## Contact Information:

Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/
COOR 5673
geoplan@asu.edu
480-965-7533

## Geographic Information Science (certificate), CERT (LAGEOGISCE)

Online Degree Search Title: Geographic Information Science (Grad Certificate)
Campus: TEMPE

Program Description: Under the auspices of the School of Geographical Sciences, the interdisciplinary certificate program in geographic information science (GIS) is administered by an executive committee. The objective of this program is to enable ASU graduate students and GIS professionals to learn how to apply GIS concepts and technology for the purpose of spatial analysis.

Degree Requirements: 16 credit hours including a Capstone course (GPH 591)
The following are required to complete the GIS certificate:

- Three required courses (9).
- Two elective courses (6).
- A capstone seminar (1).

Admission Requirements: All applicants to the certificate program must submit the Graduate College online application. Current graduate students receive priority admission to the certificate program. Students qualify for admission to the certificate program by maintaining good standing in a cooperating department and completing an application specific to the GIS certificate. Practicing professionals who already hold a graduate degree must furnish proof of an advanced degree by a formal transcript to the Graduate College. Prospective students must complete prerequisites listed for the level-one required course or pass a proficiency test.

## Contact Information:

Liberal Arts and Sciences, College of School of Geographical Sciences and Urban Planning http://geoplan.asu.edu/ COOR 5673
geoplan@asu.edu
480-965-7533

## Geographic Information Systems, MAS (LAGISMAS)

Online Degree Search Title: Geographic Information Systems (MAS)
Campus: TEMPE

Program Description: The M.A.S. in geographic information systems (GIS) program is a compact one-year nonthesis degree fostering advanced study in management and the use of GIS technology in public and corporate environments. The degree meets important educational needs of working professionals and recent college graduates seeking to improve their career standing. The program provides a comprehensive professional degree that balances work in:

- Applications domain.
- Technical side of the discipline.
- Theoretical aspects of GIS.

Students are exposed to cutting edge technology, management theory and practice, and several societal dimensions associated with the application of GIS technology.
Courses are held in the evenings and on weekends, the curriculum is highly adaptable to the work environment, and thus the M.A.S. degree is achievable in a one-year time period.

Degree Requirements: 30 credit hours and an Applied Project
Enrolling students must complete three sequential semesters of course work.

- The first semester, offered during the fall, is composed of six, two-credit-hour modules, which are not transferable.
- Students in the spring semester must complete four, three-credit-hour courses.
- During the final semester, offered through the eight-week summer sessions, students must complete: 1) three semester hours of GIS internship, and 2) a three-credit-hour capstone course.


## Admission Requirements:

- All applicants must submit the Graduate College online application.
- In addition to Graduate College admission standards, prospective students seeking the degree must have successfully completed a bachelor's degree in a related area with a minimum GPA of 3.00 ( 4.00 scale) or demonstrate a minimum of three years of related professional experience and the successful completion of a bachelor's degree in an unrelated area as determined by the M.A.S.-GIS steering committee.
- Applicants must submit two letters indicating support from any combination of current/former instructors, supervisors or professionals currently employed within GIS or a related discipline.
- Applicants must prepare a formal, written statement regarding relevant academic experience, professional experience and overall interest in GIS.

Application materials for the coming academic year are accepted and reviewed on a rolling basis until June 30. Applicants are notified of their status within six weeks of receipt of their application materials.

## Contact Information:

Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/
COOR 5673
geoplan@asu.edu
480-965-7533

## Geography, MA (LAGEOGMA)

Online Degree Search Title: Geography (MA)
Campus: TEMPE

Program Description: The M.A. in geography program is designed to offer specialized academic and professional training in geography so that the student may secure a sound graduate background for further specialization or for immediate employment. The program has sufficient flexibility to allow for individual needs and the interests of the student. A minimum of 30 credit hours beyond the bachelor's degree is required. At least 24 credit hours must be in geography.

Degree Requirements: 30 credit hours and a Thesis or 30 credit hours and a Written Comprehensive Exam (MIP)
The School of Geographical Sciences may consider a student for a traditional master's degree that includes the successful defense of a thesis. Master's students must complete 30 credit hours including 24 credit hours of combined course work and research hours at ASU and a six-credit-hour thesis.
The master's program includes: 1) two required courses (GCU 529 Geographic Thought and GCU 585 Advanced Research Methods), and 2) additional course work or research hours as selected by the student in consultation with an advisory committee.

Admission Requirements: Applicants must submit the Graduate College online application. Applications for the M.A. program must be accompanied by 1) the applicant's scores on the GRE (verbal and quantitative), and 2) three letters of recommendation from professors. All applications are reviewed by the graduate recruiting and admissions committee and the director of the School of Geographical Sciences.
It is presumed that all students entering the master's program have an adequate background in geography, including course work that is the equivalent of GPH 371 Introduction to Cartography and Georepresentation and GCU 495 Quantitative Methods in Geography. Additional prerequisite course work is required of students insufficiently prepared in geography.

## Contact Information:

Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/
COOR 5673
geoplan@asu.edu
480-965-7533

Program Description: The Ph.D. program provides specialized academic and professional training in geographical sciences so that the student can secure a sound background for further research and teaching and for immediate employment.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
Ph.D. students entering with a bachelor's degree must complete 84 credit hours. These hours include 72 credit hours of course work and research at ASU and 12 dissertation hours. Entering students without a master's degree can earn a master's-in-passing upon the completion of 30 credit hours at ASU, including GCU 529 Geographic Thought, GCU 585 Advanced Research Methods and one seminar (GCU/GPH 591), and passing the school's Research and Field examination.
Ph.D. students entering with a master's degree must complete 54 credit hours. These include 42 credit hours of combined course work and research hours at ASU and 12 dissertation hours. The Ph.D. program includes two required courses (GCU 529 Geographic Thought, GCU 585 Advanced Research Methods), two seminars (GCU/GPH 591) and additional course work or research hours as selected by the student in consultation with an advisory committee.

Admission Requirements: Applicants must submit the Graduate College online application.
The School of Geographical Sciences admits students to its Ph.D. program with either a master's or a bachelor's degree in geography or a related field. We welcome applicants without geography degrees. Incoming students must demonstrate or attain competence in cartography and quantitative methods and complete other basic course work that will enable them to pursue graduate studies in their area of specialization.
Applications for the Ph.D. program must be accompanied by 1) the applicant's scores on the GRE (verbal and quantitative), and 2) three letters of recommendations from professors. All applications are reviewed by the graduate recruiting and admissions committee and the director of geographical sciences.

## Contact Information:

Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/
COOR 5673
geoplan@asu.edu
480-965-7533

## Geological Sciences, MS (LAGEOSCMS)

Online Degree Search Title: Geological Sciences (MS)
Campus: TEMPE
Program Description: The M.S. in geological sciences program is administered by the School of Earth and Space Exploration. The program is designed to provide fundamental graduate training in geology and to prepare the student for further graduate study, or for certain careers in:

- Geochemistry.
- Geology.
- Geophysics.
- Planetary geology.
- Related fields.

Degree Requirements: 30 credit hours a Research Paper and a Written Comprehensive Exam (MIP) or 30 credit hours and a Thesis
The M.S. consists of a minimum of 30 credit hours of work beyond the bachelor's degree; 20 or more credit hours consist of course work other than research and thesis. The student, with the approval of the advisor and supervisory committee (formed upon enrollment), selects courses that make a coherent program of study.
Each M.S. candidate must include on the program of study:
GLG 500 RM: Geology Colloquium (1)
GLG 599 Thesis (6)
GLG 591: Faculty Research Seminar (1)

One-half of the credit hours applicable toward the degree must be in geological sciences courses; the remainder may include work in related fields.
Thesis Requirements: A research-based thesis is required. The final examination is an oral defense of that thesis.

Admission Requirements: Applicants must submit the Graduate College online application.
In addition to the materials required by the ASU Graduate College, students applying for admission to the geological sciences M.S. program must submit:

- GRE scores (verbal, quantitative and analytical).
- A statement of purpose.
- Three letters of recommendation.

The deadline for applications for the fall term is Jan. 15.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Geological Sciences
http://sese.asu.edu
PSF 686
seseinfo@asu.edu
480-965-5081

## Geological Sciences, PHD (LAGEOSCPHD)

Online Degree Search Title: Geological Sciences (PhD) Campus: TEMPE

Program Description: The Ph.D. in geological sciences program is administered by the School of Earth and Space Exploration. The program is designed to develop creative scholarship and to prepare the student for a professional career in the geological sciences including:

- Geochemistry.
- Geology.
- Geophysics.
- Planetary geology.
- Related fields.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation Students may be admitted into the program with a bachelor's or master's degree in a related field. Up to 30 credit hours of master'slevel work in a related field can be accepted toward the fulfillment of the Ph.D. requirements.
The plan of study for the Ph.D. is selected with the recommendation of the student's supervisory committee. Each plan of study must include 1) 12 credit hours of dissertation, and 2) 25 hours of course work. ASU Graduate College policies and procedures must also be met for admission into the program and for fulfilling the degree requirements.
Comprehensive Examination: Ph.D. candidacy is earned on the basis of a written component and an oral component. The written examination is in the form of two written research projects. The oral exam consists of an oral defense of the two projects.
Dissertation Requirements: A dissertation is required that is based on original work demonstrating creativity in research and scholarly proficiency in the subject area.
Final Examination: A final oral examination in defense of the dissertation is required.
Admission Requirements: Applicants must submit the Graduate College online application. In addition to the materials required by the ASU Graduate College, students applying to the Ph.D. in geological sciences program must submit:

- Scores on the GRE (verbal, quantitative and analytical).
- A statement of purpose.
- Three letters of recommendation.

The application deadline for fall semester is Jan. 15.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Geological Sciences
http://sese.asu.edu

PSF 686
seseinfo@asu.edu
480-965-5081
German, MA (LAGERMMA)
Online Degree Search Title: German (MA)
Campus: TEMPE

Program Description: The faculty in the School of International Letters and Cultures offers graduate programs leading to the M.A. degree with a major in German. Students admitted to the M.A. program with a major in secondary education may elect German as their subject matter field.

Degree Requirements: 30 credit hours and a Thesis or 30 credit hours including the required course (GER 593) and an Applied Project

The program of study for the M.A. includes a minimum of 30 credit hours of graduate-level work and a thesis, as approved by the candidate's supervisory committee. The program must include a 500-level bibliography and research methods course offered by the department. When approved by the candidate's supervisory committee, nine hours in another language or in closely related courses may be included in the program.

Admission Requirements: Students interested in applying for this program must submit a Graduate College online application. Candidates for the M.A. should, upon entrance, present the equivalent of an undergraduate major in the language in which the degree is sought. Those who lack this background, but who show strong potential and meet Graduate College admissions requirements, may be admitted to a graduate program on a provisional basis, pending removal of specified deficiencies. These deficiencies must be completed in addition to the regular program of study for the master's degree.
See: http://silc.clas.asu.edu/graduate/degrees/ma-german for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/graduate
LL 440
silc@asu.edu
480-965-6281

## Global Health, MA (LASSHMA)

Online Degree Search Title: Global Health (MA)
Campus: TEMPE

Program Description: In this master's degree, global health is considered to be much more and very different from international public health. It emphasizes that major health challenges stem from many factors well beyond disease itself - factors that are:

- Cultural.
- Ecological.
- Evolutionary.
- Historical.
- Institutional.
- Social.
- Technological.

Any effective, sustainable solutions to our most pressing global health challenges will need to take all of these factors into account, including the complex ways in which they relate to each other. In this manner, this degree understands health as not simply a product of disease, but rather emerging in the contexts of our complex and interrelated ecology, politics, history, culture, social institutions and evolutionary biology. It also places primacy on how to address the broader (i.e., structural, cultural) bases of illhealth in complicated, ever-changing health challenges in low-resource community settings and a globalizing world. To do this, the degree combines both social and life science theory with on-the-ground research and its application. There is a strong emphasis on collaborative action as key to identifying and addressing global health problems in a sustainable and meaningful way.
Students accepted into the program are tied to ongoing interdisciplinary global health projects that address complicated, multifaceted health challenges that defy easy fixes, such as:

- Climate-change-related disease.
- Obesity.
- Remerging infectious diseases.

Students develop an applied project to contribute to the team goals. By applying a collaborative, problem-solving format, the M.A. in global health is intended to provide those planning to enter health or related (i.e., environmental, social) fields with the interdisciplinary orientation, team-skills, and social and cultural acuity that the Pew Health Professional Consortium inter-alia has identified as critical but lacking in current health work force training. The degree also emphasizes experiential learning as a way to gain mastery and requires participation in a global internship program based in one of the international partnering communities.

Degree Requirements: 30 Credit Hours including the required course (SSH 593) and an Applied Project

All students must take SSH 502 Professional Seminar in Global Health (1) in their first and second semester for a total of two credits. This is the forum in which students will learn about the research teams and get to know faculty and other students.
Students must select at least one clearly methods-focused course or any graduate-level epidemiology course (3 credits):
AML 613 Methods and Concepts in Math Epidemiology (3)
ASB 500 Ethnographic Research Methods (3)
ESS 513 Institutions (3)
Students select three of the following courses ( 9 credits total):
ASB 510/SSH 510 Health-Social and Biocultural Theories (3)
ESS 514 Urban and Environmental Health (3)
SSH/ ASM 514 Infectious Disease and Human Evolution (3)
SSH 511 Ethics in Health Social Science Research (3)
ASM 591 ST: Infectious Disease and Human Evolution (3)
ASM 546 Principles of Human Genetics (3)
WST 710 Women and Health (3)
SSH/ASB 400 Poverty, Social Justice, and Global Health (3)
ASB 462 Culture and Health: Medical Anthropology (3)
ASB 503 Medical Anthropology (3) or POS/SGS 531 Global Health Governance (3) or approved alternatives.
Substitutes may be permitted by the graduate director, including individualized research/conference/independent study courses with approved faculty. Additional methods-focused courses and/or graduate-level epidemiology courses can count toward this requirement.
Students also complete a minimum of 10 hours of international research collaboration, internship or practicum, arranged through the school's global practicum program, which ties students to established faculty/ASU research initiatives and international collaborations.

Admission Requirements: All applicants are required to submit the Graduate College's online application. In addition to general requirements for admission to the Graduate College, the M.A. in global health program application requires students to provide:

- A current curriculum vitae or resume.
- Official GRE scores.
- An optional sample of their written work.
- A statement of purpose outlining career and educational goals.
- Three letters of recommendation.
- Transcripts of all undergraduate and graduate course work.

Admission is competitive and based on student academic excellence, additional relevant experience, plus fit to available faculty. Minimum GPA for consideration for admission would normally be 3.50, on a 4.00 scale, for the last two years of study leading to the bachelor's degree. A degree in the social or life sciences (e.g., anthropology, sociology, gender studies, geography, political science), public health, or related fields (nutrition, human biology) is generally expected for applicants. Value will be placed on:

- Prior social science and life science research.
- Practical, cross-cultural/international experiences.
- Foreign language skills.


## Contact Information:

Liberal Arts and Sciences, College of School of Human Evolution \& Social Change
http://shesc.asu.edu/graduate_studies
SHESC 233
shescgrad@asu.edu
480-965-6215

## Global Health, PHD (LASSHPHD)

Online Degree Search Title: Global Health (PhD)
Campus: TEMPE
Program Description: The Ph.D. in global health draws on the premise that sustainable and satisfying solutions to our most pressing global health challenges requires a sophisticated understanding of how cultural context, social and ecological processes and disease are really related.
The transdisciplinary graduate program trains students broadly in cutting-edge health social science research theory and methods. While it leverages the strength in medical anthropology at ASU (including the 15 medical anthropologists on campus), it also takes advantage of a much wider set of skills offered by such fields as:

- Demography.
- Epidemiology.
- Human geography.
- Medical sociology.

It is designed to train those who anticipate either working in transdisciplinary academic settings, medical schools or nonacademic health settings, such as:

- The commercial sector.
- Governmental agencies.
- Non-governmental organizations (NGOs).

Some particular thematic foci of the program are:

- Biocultural approaches to human coping.
- Computer-based complexity modeling.
- Culture and health.
- Health in the Americas.
- Indigenous and minority health.
- Mathematical epidemiology.
- Nutritional anthropology.
- Social justice and vulnerable populations.
- Social networks.
- Urban and environmental health.

The programs draw some 80 faculty from all across the university to consider how cutting-edge social science can be applied to not only understand but also to substantively improve the health of populations. The program favors community-based research and runs collaborative projects in which students are encouraged to gain experience and conduct research, from large U.S. cities to hunter-gatherer communities. Students generally enter the program with an M.A. in a relevant field.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
The Ph.D. program consists of:

- Eighty-four hours of course work post-bachelor's.
- Fifty-four hours ( 30 course work, 12 research, and 12 dissertation hours) post-master's.
- A written comprehensive examination and the oral defense of a doctoral proposal/prospectus.
- A dissertation.

Students entering with an M.A. in a related field may be granted up to 30 credit hours toward the 84 hour total required for the Ph.D. Students must maintain a "B-" (3.20) average GPA in their courses and complete degree requirements per the program's satisfactory progress policy. Students without an M.A. must earn an additional 30 hours of graduate credit, selecting courses from a number of appropriate programs on campus.
Students entering the Ph.D. in social science and health do so with diverse backgrounds and with varied career goals. Curricular tracks will tend to be individualized and final determination of the most appropriate course of study or how each requirement should most appropriately be met is made by a student in collaboration with a faculty advisor.

Admission Requirements: Applicants must submit an online Graduate College application.
In addition to general requirements for admission to the Graduate College, the social science and health Ph.D. program requires students to provide:

- A current curriculum vitae or resume.
- Official GRE scores.
- An optional sample of their written work.
- A statement of purpose outlining career and educational goals.
- Three letters of recommendation.
- Transcripts of all undergraduate and graduate course work.

Suitable backgrounds for admission include an M.A. in the social sciences (such as anthropology or sociology), public health, human biology or related fields. Students entering directly from a B.A. should already have completed at least 15 hours of social science and six hours of human biology (or equivalent) at the senior level, and should also have some background in statistics and/or epidemiology.

## Contact Information:

Liberal Arts and Sciences, College of
School of Human Evolution \& Social Change
http://shesc.asu.edu/graduate_studies
SHESC 233
shescgrad@asu.edu
480-965-6215

## Global Health (Culture and Health), PHD (LASSHCHPHD)

Online Degree Search Title: Global Health (Culture \& Health) PHD Campus: TEMPE

Program Description: The Ph.D. in global health draws on the premise that sustainable and satisfying solutions to our most pressing global health challenges requires a sophisticated understanding of how cultural context, social and ecological processes and disease are really related.
The transdisciplinary graduate program trains students broadly in cutting-edge health social science research theory and methods. While it leverages the strength in medical anthropology at ASU (including the 15 medical anthropologists on campus), it also takes advantage of a much wider set of skills offered by such fields as medical sociology, demography, human geography and epidemiology. It is designed to train those who anticipate either working in transdisciplinary academic settings, medical schools or nonacademic health settings, such as:

- The commercial sector.
- Governmental agencies.
- Nongovernmental organizations (NGOs).

Some particular thematic foci of the program are:

- Biocultural approaches to human coping.
- Computer-based complexity modeling.
- Culture and health.
- Health in the Americas.
- Indigenous and minority health.
- Mathematical epidemiology.
- Nutritional anthropology.
- Social justice and vulnerable populations.
- Social networks.
- Urban and environmental health.

The programs draw some 80 faculty from all across the university to consider how cutting-edge social science can be applied to not only understand but also to substantively improve the health of populations. The program favors community-based research and runs collaborative projects in which students are encouraged to gain experience and conduct research, from large U.S. cities to hunter-gatherer communities. Students generally enter the program with an M.A. in a relevant field.

The concentration in culture and health provides focused, specialized training in theories and methods for researching the relationship between culture and health. This concentration utilizes the perspectives of medical anthropology and sophisticated ethnographic methods to study and interpret the role of cultural and social differences in shaping health. Students investigate these methods in the context of the community-based, participatory approaches that tend to promote the most mutually meaningful and lasting health solutions. Graduates are thus particularly prepared for leadership in addressing health disparities in cross-cultural settings and with the most vulnerable populations. This includes very complex, difficult settings where particularly nuanced and sophisticated (often anthropological) understandings of health-related challenges are needed.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
The PhD program consists of:

- Eighty-four hours of course work post-bachelor's.
- Fifty-four hours ( 30 course work, 12 research, and 12 dissertation hours) post-master's.
- A dissertation.
- A written comprehensive examination and the oral defense of a doctoral proposal/prospectus.

Students entering with an M.A. in a related field may be granted up to 30 credit hours toward the 84 hour total required for the Ph.D. Students must maintain a "B-" (3.20) average GPA in their courses and complete degree requirements per the program's satisfactory progress policy. Students without an M.A. must earn an additional 30 hours of graduate credit, selecting courses from a number of appropriate programs on campus.

## Required Courses:

ASB 503 Advanced Medical Anthropology (3)
ASB 500 Ethnographic Research Methods (3)
SSH 503 Instructional Internship in Global Health (3)

One of the following (3):
SSH 512 Social Science Applications in Community Health
ASB 502 Applied Medical Anthropology
SSH 511 Ethics in Health Social Science

One of the following (3):
ESS 513 Institutions
ESS 514 Urban and Environmental Health

Admission Requirements: All applicants must submit the Graduate College online application. In addition to the general requirements for admission to the Graduate College, the School of Human Evolution and Social Change requires applicants to provide:

- A current curriculum vitae or resume.
- Official GRE scores.
- An optional sample of their written work.
- A statement of purpose outlining career and educational goals.
- Three letters of recommendation.
- Transcripts of all undergraduate and graduate coursework.

Suitable backgrounds for admission include an M.A. in the social sciences (such as anthropology or sociology), public health, human biology or related fields. Students entering directly with a B.A. should already have completed at least 15 hours of social science and six hours of human biology (or equivalent) at the senior level, and should also have some background in statistics and/or epidemiology. Minimum GPA for consideration for admission would normally be 3.20 ( 4.00 scale) for the last two years of study leading to the bachelor's degree, or 3.50 average GPA or equivalent in a master's program.

## Contact Information:

Liberal Arts and Sciences, College of School of Human Evolution \& Social Change http://shesc.asu.edu/social_science_health SHESC 233
shescgrad@asu.edu
480-965-6215

## Global Health (Evolutionary Global Health Sciences), PHD (LASSHEPHD)

Online Degree Search Title: Global Health (Evolutionary Global Health Sciences) PhD Campus: TEMPE

Program Description: The Ph.D. in global health with a concentration in evolutionary global health sciences will provide research training in anthropological and evolutionary theories and methods to investigate complex relationships among the processes by which cultural, ecological, environmental (natural and built) and genetic dimensions produce, through intergenerational transmission, the uneven but shared patterns of human population health. It is a standard type of concentration to be offered only under the Ph.D. in global health. The curriculum draws from a trans-disciplinary academic approach based on the fields of cultural evolutionary ecology and human behavioral ecology in combination with evolutionary theories (niche construction, dual inheritance and life history) and observational social sciences and public health methods that simultaneously take into account the effects of culture, ecology, environment and genetics on health. The concentration requires training in universal principles of research design from experiments to systematic qualitative and quantitative description - data analyses methods (quantitative and qualitative) and anthropological interpretation, or the identification of determinants of the origins and distribution of health phenotypes in past and present human populations. Students will choose from a wide range of data collection and inferential tools in order to address specific questions, through a combination of lecture and guided reading courses designed to master the highly diverse literature in evolutionary global health sciences that best pertains to their career goals.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The Ph.D. in global health with a concentration in evolutionary global health sciences requires the following:
Core courses (10 credit hours)
SSH 510 Health: Social and Biocultural Theories or approved equivalent
SSH 513 Research Design and Proposal Writing in Health Social Science or approved equivalent
SSH 502 Professional Seminar in Global Health or approved equivalent
Concentration courses (16 credit hours)
SSH 503 Advanced Medical Anthropology or equivalent
ASB 500 Ethnographic Research Methods or equivalent
ESS 513 Institutions or equivalent
ASM 560 Human Growth and Development: An Evolutionary Perspective or equivalent
SSH/ASM 514 Infectious Disease and Human Evolution
Elective courses (16 credit hours)
ASB 510/SSH 510 Health - Social and Biocultural Theories or approved equivalent
ASM 546 Principles of Human Genetics or approved equivalent
ASB 537 OR ASM 591 Topics in Mesoamerican Archeology OR Human Growth and Development
And other relevant electives from SHESC, SOLS, etc.
12 credit hours of SSH 799 Dissertation

Admission Requirements: Minimum of a bachelor's degree (or equivalent) or a graduate degree from a regionally accredited college or university of recognized standing in the field of evolutionary sciences. In addition, a master's degree in the evolutionary sciences (genetics, evolutionary ecology), public health sciences, economics and all subfields in anthropology is required.
Minimum of a 3.20 cumulative GPA (scale is $4.00=\mathrm{A}$ ) in the last 60 hours of a student's bachelor's degree program or 3.50 average GPA (or equivalent) on a master's degree.
GRE required.

## Contact Information:

Liberal Arts and Sciences, College of
School of Human Evolution \& Social Change
http://shesc.asu.edu/social_science_health
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shescgrad@asu.edu
480-965-6215

## Global Health (Urbanism), PHD (LASSHURPHD)

Online Degree Search Title: Global Health (Urbanism) PhD
Campus: TEMPE

Program Description: The Doctor of Philosophy in global health focuses on the premise that sustainable and satisfying solutions to our most pressing global health challenges requires a sophisticated understanding of how cultural context, social and ecological processes and disease are related. The transdisciplinary graduate program trains students broadly in cutting-edge health social science research theory and methods. While it leverages its strength in medical anthropology at ASU (including the 15 medical anthropologists on campus), it also takes advantage of a much wider set of skills offered by such fields as:

- Demography.
- Epidemiology.
- Human geography.
- Medical sociology.

It is designed to train those who anticipate either working in transdisciplinary academic settings, medical schools or nonacademic health settings, such as:

- The commercial sector.
- Governmental agencies.
- Nongovernmental organizations.

Some particular thematic foci of the program are:

- Biocultural approaches to human coping.
- Computer-based complexity modeling.
- Culture and health.
- Health in the Americas.
- Indigenous and minority health.
- Mathematical epidemiology.
- Nutritional anthropology.
- Social justice and vulnerable populations.
- Social networks.
- Urban and environmental health.

The concentration in urbanism will leverage the varied interests in urbanism and help emerging scholars as they attempt to compare, contrast and take stock of urbanism as they pertain to the thematic foci of the program. Working with faculty from across a range of departments and programs at ASU, doctoral students will be able to capture the creative tensions that scholarship on urbanism has inspired in order to stimulate a provocative, constructive kind of inquiry.
Academic units the students might engage with to fulfill the requirements of the urbanism concentration include:

- Herberger Institute for Design and the Arts.
- School of Community Resources and Development.
- School of Geographical Sciences and Urban Planning.
- School of Politics and Global Studies.
- School of Historical, Philosophical and Religious Studies.
- School of Human Evolution and Social Change.
- School of Sustainability.

The programs draw some 80 faculty from all across the university to consider how cutting-edge social science can be applied to not only understand but also to substantively improve the health of populations. The program favors community-based research and runs collaborative projects in which students are encouraged to gain experience and conduct research into societies from large U.S. cities to hunter-gatherer communities. Students generally enter the program with a master's degree in a relevant field.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The Ph.D. program consists of:

- Eighty-four hours of course work post-bachelor's.
- Fifty-four hours ( 30 course work, 12 research, and 12 dissertation hours) post-master's.
- A written comprehensive examination and the oral defense of a doctoral proposal/prospectus.
- A dissertation.

Students entering with an M.A. in a related field may be granted up to 30 credit hours toward the 84 hour total required for the Ph.D. Students must maintain a "B-" 3.20 average GPA in their courses and complete degree requirements per the program's satisfactory progress policy. Students without an M.A. must earn an additional 30 hours of graduate credit, selecting courses from a number of appropriate programs on campus.

Curricular tracks will tend to be individualized and final determination of the most appropriate course of study or how each requirement should most appropriately be met is made by a student in collaboration with a faculty advisor. For the concentration in urbanism, 15 credit hours will be selected from an approved list of applicable courses related to urbanism. These courses will include the core urbanism course, GCU 516, as well as one course from each of the four urbanism clusters. These clusters are:

- Built form.
- Culture and society.
- Institutions and governance.
- Natural environment.

Admission Requirements: All applicants must submit the Graduate College online application. In addition to the general requirements for admission to the Graduate College, the School of Human Evolution and Social Change requires applicants to provide:

- A current curriculum vitae or resume.
- Official GRE scores.
- An optional sample of their written work.
- A statement of purpose outlining career and educational goals.
- Three letters of recommendation.
- Transcripts of all undergraduate and graduate course work.

Suitable backgrounds for admission include a master's degree in the social sciences (such as anthropology or sociology), public health, human biology or related fields. Students entering directly from a bachelor's program should already have completed at least 15 hours of social science and six hours of human biology (or equivalent) at the senior level, and should also have some background in statistics and/or epidemiology.

## Contact Information:

Liberal Arts and Sciences, College of
School of Human Evolution \& Social Change
http://shesc.asu.edu/social_science_health
SHESC 233
shescgrad@asu.edu
480-965-6215

## History, MA (LAHISTMA)

Online Degree Search Title: History (MA)
Campus: TEMPE
Program Description: The faculty in history offer a graduate program leading to the M.A. in history. Candidates are offered an opportunity to develop knowledge of a specific historical field, to study comparative history and to learn research techniques.

Degree Requirements: 30 credit hours a Thesis and a Foreign Language Exam or 30 credit hours and a Portfolio (MIP) or 30 credit hours including the required course (HST 593 or HST 692) an Applied Project and a Foreign Language Exam

A minimum of 30 credit hours of graduate studies are required for a master's degree in history: 24 credit hours of course work, plus six hours of thesis research credits (HST 599). The thesis equivalent option substitutes six credit hours of HST 592 or HST 593 in place of the six hours of HST 599 and requires as well an additional three credit hours of HST 591 (six total instead of three) in the 30 hours of the plan of study. See http://shprs.clas.asu.edu/masters_hst for more information. With the approval of the supervisory committee, candidates may take up to six credit hours of closely related interdisciplinary course work in another academic unit. Master's students select a primary field and a research specialization. Available primary fields include:

- East/Southeast Asia.
- Europe.
- Latin America.
- North America.
- Public history.

Note: public history students pursue a double concentration, e.g., public history and North American history, or public history and European history. For public history information and requirements see http://shprs.clas.asu.edu/publichistory.

Advising: At the beginning of the first semester of study, the student, in consultation with the graduate director, selects a faculty advisor who will help direct the student to the completion of the required course work and thesis. Normally, the advisor is selected,
at least tentatively, prior to enrollment or within the first six weeks of the fall semester. The faculty advisor helps the student select the other two members of the supervisory committee and together they develop the plan of study. The advisor, with the candidate, is primarily responsible for determining the plan of study, selecting the topic of the thesis or of the thesis equivalent, and guiding the student's research. The second and third committee members must be selected by the time the program of study is submitted at the end of the first year.
Thesis: The culminating experience of the master's degree program is the writing, presentation and defense of a thesis or thesisequivalent based on original research. The thesis, an extended essay of approximately 100 pages, addresses a topic chosen by the student in consultation with the faculty advisor who serves as chair of the supervisory committee. The thesis explores a limited subject in depth, analyzing, explaining and drawing conclusions from the information gleaned from primary and secondary sources. The thesis thereby demonstrates the student's ability to:

- Analyze and argue points cogently.
- Do research in the primary sources of the field.
- Organize and develop a topic.
- Survey and synthesize the relevant secondary literature on the topic.
- Write proficiently.


## Admission Requirements:

- Online electronic application: Students apply for admission both to the Graduate College and to a degree program (e.g., the M.A. in history). The history program is affiliated with several graduate certificate programs including scholarly publishing and medieval and renaissance studies. Students applying for admission to the master's program in history and a certificate program, such as the Scholarly Publishing Certificate Program, are required to submit two separate applications (for the degree program and for the certificate program).
- Transcripts: Should be mailed to the Graduate College at the address below. It is not necessary to mail transcripts to the history program. Arizona State University, Graduate College, 1120 S. Cady Mall INTDSB-B256, Tempe, AZ 85287-1003.
- GRE scores: A report of the scores received on the GRE must be submitted to the Graduate College. Scores should be no more than five years old.
- Letter of application: Addressed to the history admissions committee explaining your scholarly background and training, your career goals, the primary field you wish to pursue, your proposed research specialization, and why you want to pursue graduate study at ASU (about 500 words in length).
- Resume: Upload into online application.
- Data form: Please download the form to your desktop, and upload into your online application. The form is located at: http://shprs.clas.asu.edu/history_application.
- Writing sample:A sample of your written work should be submitted electronically. The writing sample may be an article (published or unpublished), a research paper, or any other extended sample of your expository skill no longer than 35 pages in length. Longer writing samples should not be submitted without first consulting the Graduate Director. Documents and files should not be password protected. Acceptable file types are .rtf, .pdf, and .doc.
- Assistantship application: Application form for a graduate assistantship, if desired, can be downloaded at http://shprs.clas.asu.edu/history_application. The form should be emailed to: graduate.history@asu.edu.
- References: Students are required to submit a minimum of three e-mail addresses from faculty or others qualified to speak of the student's suitability for graduate study in history.
- International Students: Students applying from outside the U.S. whose native language is not English must follow Graduate College guidelines demonstrating English language proficiency. The Graduate College's minimum Test of English as a Foreign Language (TOEFL) score is 550; however, the history program requires a score of at least 600 . Students whose original language is other than English must send a copy of an article or research paper in their native or principal research language in addition to the English writing sample required of all students. Prospective international students applying for teaching assistant positions must achieve a score of 55 or higher on the Test of Spoken English (TSE) or Speaking Proficiency English Assessment Kit (SPEAK).


## Contact Information:

Liberal Arts and Sciences, College of
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http://history.clas.asu.edu
COOR 3312
graduate.history@asu.edu
480-965-5387

## History, PHD (LAHISTPHD)

Online Degree Search Title: History (PhD)
Campus: TEMPE

Program Description: The Ph.D. in history offers candidates the opportunity to study past and contemporary civilizations and to learn research and writing techniques that may be used in scholarly careers:

- In business.
- In historical societies and agencies.
- At leading academic institutions.
- In the public sector.

Major emphasis is placed upon:

- Competence in historical research methodology.
- Developing a disciplined mind.
- Expertise in a chosen subject area.

The program is composed of small classes that bring students into a close working relationship with faculty and other graduate students.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The doctoral degree requires 84 total credit hours beyond the bachelor's. Students with a master's degree in history are allowed to apply 30 credit hours of that degree toward the 84 total credit hours required for the doctoral program. Sixty credit hours must be in history courses and must meet the following requirements:

- Fifty-four credit hours must be taken in residence at ASU.
- In general, all credit hours must be at the 500 level or above (graduate credit for 400 -level courses must be approved in advance and documented in the student's file).
- At least nine credit hours must be taken in the primary field and six hours in the secondary field. These will normally be HST 598 or HST 591 courses but may include directed readings, HST 790.
- Nine credit hours must be taken of HST 591, research seminars. Only one seminar is transferable from a master's degree.
- Six credit hours must be taken in "core" field courses for U.S. and European majors only.
- Three credit hours of HST 500 Historical Theory and Methodology, are required during the first year.
- Twenty-four credit hours must be taken in dissertation research, 12 hours each of HST 792 and HST 799.

Students must select a primary field, a secondary field, and a research specialization. There is a written qualifying exam in the primary field and a portfolio defense for the secondary field. The dissertation is written in the area of the research specialization. Advanced Research Skill Requirement: Doctoral students must also demonstrate proficiency in one or more foreign languages relevant to their fields of study and/or an advanced research skill relevant to their dissertation research (e.g., oral history, geographic information systems, documentary editing, statistical analysis or methodological-theoretical training in a related discipline).
Advising: For guidance through the program, students select a supervisory committee of at least three faculty members, with the student's advisor serving as committee chair. Students also select a separate secondary field committee to evaluate their secondary field portfolio. The primary field qualifying examination is administered by an ad hoc committee composed of professors who have taught the core courses in that field. The dissertation prospectus and dissertation are evaluated by the supervisory committee. Dissertation: The culminating experience for the Ph.D. in history is the dissertation. Approximately 250-300 pages in length, it must be an original contribution to knowledge and demonstrate the candidate's proficiency in independent research and historical exposition. The research topic is chosen by the student in consultation with the faculty advisor who serves as chair of the supervisory committee. T

## Admission Requirements:

- Online electronic application: Students apply for admission both to the Graduate College and to a degree program (e.g., the Ph.D. in history). The history program is affiliated with several graduate certificate programs, including scholarly publishing and medieval and renaissance studies. Students applying to the Ph.D. in history as well as one of these certificate programs must submit two separate applications (for the degree program and for the certificate program).
- Transcripts: Should be mailed to the Graduate College at the address below. It is not necessary to mail transcripts to the history program. Arizona State University, Graduate College, 1120 S. Cady Mall INTDSB-B256, Tempe, AZ 85287-1003.
- GRE scores: A report of the scores received on the GRE must be submitted to the Graduate College. Scores should be no more than five years old.
- Letter of application: Addressed to the history review committee explaining your scholarly background and training, your career goals, the primary and secondary fields of study you wish to pursue, your proposed research specialization, and why you want to pursue graduate study at ASU (about 500 words in length).
- Resume: Upload into online application.
- Data form: Please download the form to your desktop, and upload into your online application. The form is located at: http://shprs.clas.asu.edu/history_application.
- Writing sample: A sample of your written work should be submitted electronically. The writing sample may be an article (published or unpublished), a research paper, or any other extended sample of your expository skill no longer than 35 pages in length. Longer writing samples should not be submitted without first consulting the Graduate Director. Documents should not be password protected. Acceptable file types are .rtf, .pdf, and .doc. Files should not be password protected.
- Assistantship application: Application form for a graduate assistantship, if desired, can be loaded at
http://shprs.clas.asu.edu/history_application. The form should be emailed to: graduate.history@asu.edu. See special requirements below for international students applying for graduate assistantships.
- References: Students are required to submit a minimum of three (3) e-mail addresses from faculty or others qualified to speak the student's suitability for graduate study in History.
- International Students: Students applying from outside the United States whose native language is not English must follow Graduate College guidelines demonstrating English language proficiency. See http://graduate.asu.edu/admissions/international. The Graduate College's minimum Test of English as a Foreign Language (TOEFL) score is 550; however, the history program requires a score of at least 600. Students whose original language is other than English must send a copy of an article or research paper in their native or principal research language in addition to the English writing sample required of all students.


## Contact Information:

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http://history.clas.asu.edu
COOR 3312
graduate.history@asu.edu
480-965-5387

## Immigration Studies (certificate), CERT (LAIMMSTUCE)

Online Degree Search Title: Immigration Studies (Grad Certificate) Campus: TEMPE

Program Description: The immigration studies graduate certificate program provides students with an understanding of the causes and consequences of international migration as well as relevant professional and research training opportunities. The program prepares graduates for future study in graduate and professional schools or for careers as immigration practitioners and advocates in nongovernmental organizations, local and federal government agencies, as well as in other private and public institutions serving immigrant and refugee communities. The objective of the certificate program is to offer both traditional academic training through course work and research and practical experience working with local immigrant/refugee communities.

Degree Requirements: 15 credit hours
The certificate consists of 15 total credit hours. All students will be required to take:

- One core course.
- Three approved elective courses on immigration.
- Three hours of a culminating experience (either an internship or a research project).

For a list of approved courses, please contact the school.
Internship: Students may do an internship with Phoenix-based, nongovernmental organizations or government agencies that provide services to immigrants and refugees. Such internships will give them professional training and actual experience working with immigrant/refugee communities. Students will be required to write a report describing the organization and their experience as interns.
Research: Students may enroll in three credits of research with a faculty member in order to do an independent research project. They must write a substantial research paper based on field research in a local immigrant community, library/archival research or readings on an immigration topic.
Certificate students may choose to specialize in:

- The humanities.
- Mexican and Latino immigrants in the U.S.
- The social sciences.

Given the nature of the immigration courses offered at ASU and the preponderance of Latino immigrant communities in the Phoenix area, the program emphasizes Latino immigration. However, students will have the opportunity to take broader courses focusing on
global migration and other immigrant groups, as well as work with local Asian/Southeast Asian immigrants and refugee communities.
All requirements for the certificate program should be completed within a three-year time limit with a cumulative grade point average of at least 3.00. Students who require more time to finish the program (because of their part-time status or lack of desirable/available courses) must obtain approval from the executive committee.
For students currently enrolled in an ASU graduate degree program, applicable certificate courses may count towards their degree program with the approval and consent of the degree granting program. For certificate students who are later admitted to an ASU graduate degree program, up to 12 credit hours from the certificate program may count towards their doctoral degree or up to nine credit hours may count towards their master's degree with the approval and consent of the degree-granting program.

Admission Requirements: Applicants must submit an online Graduate College application.
In addition to the general requirements for admission to the Graduate College, the School of Human Evolution and Social Change requires applicants to provide:

- A current curriculum vitae or resume.
- A minimum of one and a maximum of three letters of recommendation.
- Official GRE scores.
- An optional sample of their written work.
- A statement of purpose outlining career and educational goals.
- Transcripts of all undergraduate and graduate course work.

Applicants should have achieved a minimum GPA of 3.00 in the last 60 hours of their bachelor's degree. Undergraduate course work in anthropology is not a prerequisite for admission, but is generally advisable. Students may be admitted without such a background and may be required to acquire knowledge of general anthropology in a manner to be specified at the time of admission.

## Contact Information:

Liberal Arts and Sciences, College of
School of Human Evolution \& Social Change
http://shesc.asu.edu/immigration_studies_certificate
SHESC 233
shescgrad@asu.edu
480-965-6215

## Infant Family Practice, MAS (LACDEMAS)

Online Degree Search Title: Infant - Family Practice (MAS)
Campus: TEMPE

Program Description: This self-contained accelerated program provides high-quality course work and supervised internship experiences designed to train professionals to work in prevention and intervention programs serving families with infants, toddlers and preschool-age children.
The program prepares individuals for positions in a variety of professional capacities including:

- Child abuse prevention.
- Early childhood administration.
- Early intervention.
- Family support and child care.
- Infant mental health.

Course work prepares students for professional endorsement by the Infant-Toddler Mental Health Coalition of Arizona's Endorsement for Culturally Sensitive, Relationship-Based Practice Promoting Infant Mental Health.

Degree Requirements: 30 Credit Hours and a Portfolio
The M.A.S. in infant-family practice requires the successful completion of 1) a minimum of 30 credit hours, and 2) an applied project, including required course work and an internship in a community placement approved by the M.A.S. in infant-family practice faculty. Internships are expected to last approximately 12 months. Students must maintain a GPA of 3.00 in all course work and satisfactorily meet the expectations of the agency supervising their internship.
Foreign Language Requirements: None
Thesis Requirements: None
GRE Scores: GRE scores are waived for this program.

Admission Requirements: Applicants must submit the Graduate College online application.
Admission to the program is determined by the following criteria:

- Admission to the ASU Graduate College.
- Official transcripts of the student's academic record.
- A personal statement.
- Three letters of recommendation from individuals familiar with the applicant's academic background.

In addition, selected candidates will be contacted for an interview.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social and Family Dynamics
http://ssfd.clas.asu.edu/
SS 144
email@ssfd.info
480-965-6978

## Justice Studies, MS (LAJUSSTMS)

Online Degree Search Title: Justice Studies (MS)
Campus: TEMPE

Program Description: The M.S. in justice studies is designed to prepare students for:

- Further study and research in the justice field.
- Professional positions in justice-related organizations.
- Teaching in community colleges.

Students use elective courses to develop a specialization in an area relevant to their own interests and consistent with the school's focus on the following areas:

- Citizenship, migration and human rights.
- Globalization, sustainability and economic justice.
- Law, policy and social change.
- Media, technology and culture.
- Social identities and communities.

Degree Requirements: 36 credit hours and a Research Paper (MIP) or 36 credit hours and a Thesis or 36 credit hours including the required course (JUS 593) and an Applied Project
The M.S. program has two options: a thesis or an applied project.
Thesis option
The thesis option requires the completion of 36 credit hours and six of these credit hours are JUS 599 Thesis. To satisfy the thesis requirement for the degree, candidates must write a thesis and defend it in an oral examination conducted by the student's advisory committee.
Applied project option
The applied project option requires the completion of 36 credit hours and six of these credit hours are JUS 593 Applied Project. Candidates pursuing the applied project option must present their applied project and defend it in an oral examination conducted by the faculty member who supervises the project and the graduate programs director or designated representative. The applied project typically includes a brief literature review to identify the nature of the issue or problem and a description of the methodology used and, if relevant, of the program studied, followed by an analysis.
Each student's program is developed in concert with the advisory committee. The program has three major categories:

- Foundation courses.
- Elective courses.
- Thesis and applied project requirements.

The required foundation courses provide students with a fundamental understanding of the theories, methods and analytic techniques associated with the study of justice. The foundation courses include:
JUS 500 Justice Research Methods (3)
JUS 501 Justice Theory (3)
JUS 509 Statistical Problems in Justice Research (3)
JUS 521 Qualitative Data Analysis and Evaluation (3)

Admission Requirements: All applicants must submit the Graduate College online application. In addition to the general admission requirements of the Graduate College, applicants must submit the following materials by Dec. 14 for fall admissions: 1) GRE scores or LSAT score taken within the last five years, and 2) transcripts.
Send these materials to:
Graduate College
Arizona State University
P.O. Box 871003

Tempe, AZ 85287-1003
Applicants must submit these items directly to Justice and Social Inquiry by the same deadline:

- Personal statement ( $11 / 2$ to 2 pages, double spaced) outlining areas of interest, educational and career goals.
- Three letters of reference (academic references are preferred).
- A writing sample (research that best represents your academic thinking and writing skills and a minimum of ten pages).

Send these materials to:
Justice and Social Inquiry Graduate Programs
Arizona State University
P.O. Box 874902

Tempe, AZ 85287-4902

## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://justice.clas.asu.edu/graduate
WILSN 217
graduate.justice@asu.edu
480-965-6008

## Justice Studies, PHD (LAJUSSTPHD)

Online Degree Search Title: Justice Studies (PhD)
Campus: TEMPE
Program Description: The doctoral program in justice studies is an interdisciplinary degree program offered through the auspices of Justice and Social Inquiry in the School of Social Transformation. The program integrates philosophical, legal and ethical approaches with social science and humanities perspectives to study five areas of interest:

- Citizenship, migration and human rights.
- Globalization, sustainability and economic justice.
- Law, policy and social change.
- Media, technology and culture.
- Social identities and communities.

Justice and Social Inquiry is recognized as a leader in the interdisciplinary study of justice and a pioneer in the establishment of a fullfledged program in the field.
The Ph.D./J.D. option allows qualified students to earn a Juris Doctorate from ASU's Sandra Day O'Connor College of Law while simultaneously earning an interdisciplinary Ph.D. in Justice Studies. Students must apply separately to both programs.

Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation
Students in the doctoral program must complete three foundation courses as a part of their course work for the Ph.D. in justice studies. Students must earn a grade of "B" (3.00) or higher in each of the foundation courses:
JUS 620 Justice Research Methodology (3)
JUS 630 Data Analysis for Justice Research (3) or JUS 650 Advanced Qualitative Data Analysis (3)
JUS 640 Theoretical Perspectives on Justice (3)
Students entering the doctoral program with a master's or J.D. degree are required to complete 54 credit hours:

- Eighteen credit hours are comprised of any combination of additional elective courses, reading or conference hours, or research hours.
- Fifteen credit hours are elective classroom hours, nine credit hours must have a JUS prefix.
- Nine credit hours are Ph.D. core courses.
- Twelve credit hours are earned as dissertation research.

Students entering the doctoral program without a master's or J.D. degree are required to complete 84 credit hours:

- Nine credit hours are required Ph.D. courses.
- Twelve credit hours are earned as dissertation research credit.
- Twelve credit hours are 500-level foundation courses.
- Twenty-four credit hours are elective classroom hours, fifteen credit hours must have a JUS prefix.
- Twenty-seven credit hours are comprised of any combination of additional elective courses, reading and conference hours or research hours.

Admission Requirements: All applicants must submit the Graduate College online application. In addition to the general admission requirements of the Graduate College, applicants must submit the following materials by Dec. 14 for fall admissions: 1) GRE scores or LSAT score taken within the last five years, and 2 ) transcripts.
Send these materials to:
Graduate College
Arizona State University
P.O. Box 871003

Tempe, AZ 85287-1003
Applicants must submit these items directly to Justice and Social Inquiry by the same deadline:

- A personal statement ( $11 / 2$ to 2 pages, double spaced) outlining areas of interest, educational and career goals.
- Three letters of reference (academic references are preferred).
- A writing sample (research that best represents your academic thinking and writing skills and is a minimum of ten pages).

Send these materials to:
Justice and Social Inquiry Graduate Programs
Arizona State University
P.O. Box 874902

Tempe, AZ 85287-4902

## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://justice.clas.asu.edu/graduate
WILSN 217
graduate.justice@asu.edu
480-965-6008

## Liberal Studies, MLSt (LAMLSMLS)

Online Degree Search Title: Liberal Studies (MLSt)
Campus: TEMPE

Program Description: The M.L.St. offers students interested in a multidisciplinary approach to human ideas and values an opportunity to expand their liberal arts background. The program is intended for students seeking a graduate degree that explores the integration of the humanities with political, religious, social and scientific questions within their cultural contexts. The program connects students to the entire College of Liberal Arts and Sciences and integrates the disciplines.

Degree Requirements: 30 credit hours including the required course (MLS 593) and an Applied Project
Students are required to take three core classes, six electives and an applied project. We offer four core classes and students select any three of the four offered.
Core Courses, three hours each
MLS 501 Writing About Social Issues
MLS 502 Religion, Health and Culture
MLS 503 Ethics, Science and Culture
MLS 504 Film and Media Studies

Electives
Eighteen hours of electives, no more than nine in the same department.
Emphasis areas available:

- Borders: migration, health and cultural identity.
- Gender, religion and culture.
- Science, nature and creative nonfiction writing.

Admission Requirements: Applicants must submit:

- An online Graduate College application.
- A letter of interest in the program.
- A resume, biographical statement or curriculum vitae.


## Contact Information:

Liberal Arts and Sciences, College of Dean, College of Liberal Arts and Sciences
http://clas.asu.edu/liberalstudies/mls
WILSN 310
480-727-0819

## Liberal Studies (Film and Media Studies), MLSt (LAFMSMLS)

Online Degree Search Title: Liberal Studies - Film and Media Studies (MLSt)
Campus: TEMPE

Program Description: The M.L.St. in film and media studies offers students interested in a multidisciplinary approach to international human ideas and values an opportunity to expand their liberal arts background through the study of film and media in society. The program is intended for students seeking a graduate degree that explores the integration of the humanities with political, religious, social and scientific questions within their cultural contexts. Studies focus on the aesthetics and theory of international film and media. The program connects students to the entire College of Liberal Arts and Sciences and integrates the disciplines.

Degree Requirements: 30 credit hours including the required course (MLS 593) and an Applied Project
Students are required to take three core classes, six electives and an applied project. We offer four core classes and students select any three of the four offered.
Core Courses
MLS 501 Writing About Social Issues (3)
MLS 502 Religion, Health and Culture (3)
MLS 503 Ethics, Science and Culture (3)
MLS 504 Film and Media Studies (3)
Electives (18)
Admission Requirements: Applicants must submit:

- An online Graduate College application.
- A letter of interest in the program.
- A resume, biographical statement or curriculum vitae.


## Contact Information:

Liberal Arts and Sciences, College of Dean, College of Liberal Arts and Sciences
http://clas.asu.edu/liberalstudies/mls
WILSN 310
480-727-0819

## Linguistics (certificate), CERT (LALINGUICE)

Online Degree Search Title: Linguistics (Grad Certificate)
Campus: TEMPE
Program Description: This interdisciplinary graduate certificate in linguistics offers students in several fields the opportunity to gain an understanding of the way in which languages are structured, how they are acquired and how they vary over time, space, social distance and situational contexts.
The skills acquired through the completion of the core courses for this certificate include:

- Analytical abilities.
- Communication skills.
- Critical thinking.
- Problem-solving.

In addition, the knowledge acquired in the areas of discourse analysis and pragmatics makes students aware of the necessity to use appropriate registers and styles when creating written documents or oral presentations to different audiences.

Degree Requirements: 18 credit hours
The required nine credit-hour core of the certificate consists of courses in:

- Discourse analysis/pragmatics.
- Phonology.
- Syntax.

The other three courses (nine credit hours) may be chosen from fields such as:

- Applied linguistics.
- Computer science.
- Culture.
- Education.
- Language.
- Second language acquisition.
- Sociolinguistics.

Prerequisite: Introductory course in linguistics (taken at the upper-division or graduate level, e.g., FLA 400/598, LIN 510, ASB 480/598 or equivalent).
All certificate course work must be completed with an average grade of "B" (3.00) or higher.

## Admission Requirements: Eligibility and Application

The graduate certificate in linguistics is available to all ASU graduate students irrespective of their major and to nondegree graduate students and working professionals provided they meet eligibility criteria. Students are advised that only nine hours may be taken in nondegree/certificate status and applied to a graduate degree/certificate program.
Eligibility requirements for obtaining the graduate certificate include having:

- Completed an undergraduate bachelor's degree from an U.S.-accredited institution or equivalent.
- Formal knowledge of a foreign language, equivalent to two years of study of a foreign language at the university level or plans to fulfill the language requirement concurrently with their certificate courses. The language requirement may be met by completion of courses through the second-year level (four semesters) at ASU or elsewhere, or completion of an upper-division language course with an average of " $B$ " ( 3.00 ) or better for all such coursework ( 200 or 300 -level), or through examination (Language placement tests are available online at the Language Placement Policies and Tests website. See: http://www.asu.edu/languages), indicating they should be placed above the 200-level. If this requirement is not already fulfilled at the time of application, candidates must demonstrate completion of this requirement at the end of their certificate coursework, in order for their certificate to be granted.
- Taken an introductory course in linguistics at the upper-division or graduate level, e.g., FLA 400/598, LIN 510, ASB 480/598 or equivalent.


## Application Process

Applications are accepted year-round.
Complete the Graduate College online application and submit the application fee.
Supporting documents consisting of a resume and statement of purpose can be uploaded into the online application. The statement should be a one- to two-page, well-considered statement of purpose detailing the student's background and reasons for wanting to complete the linguistics certificate.
Once the student has filed the online application, he or she should send unofficial transcripts, the statement of purpose and a resume via email to the Graduate Coordinator in the Department of English at sheila@asu.edu with the subject heading "Linguistics Certificate Application".
For further information e-mail >enggrad@asu.edu or call 480-965-3194.
Questions about the application process and other logistical matters concerning the certificate should be directed to enggrad@asu.edu or 480-965-3194.
Supporting Documentation
At the initial meeting with the certificate faculty advisor students must submit a copy of official transcripts attesting to the completion of a bachelor's degree from a U.S.-accredited institution or equivalent, and/or showing any courses to meet the
language requirement and any core and/or elective courses already taken toward the certificate. Proof of a complete bachelor's degree is only required of students admitted to the certificate program as nondegree graduate students.

## Contact Information:

Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/gradstudies-lingcert
LL 543B
enggrad@asu.edu
480-965-3194

## Marriage and Family Therapy, MAS (LAMFTMAS)

Online Degree Search Title: Marriage and Family Therapy (MAS)
Campus: TEMPE

Program Description: The purpose of this self-contained accelerated program is to provide high quality course work and supervised internship experiences that meet the degree requirements for licensure in the State of Arizona to practice marriage and family therapy as determined and laid out by the Arizona Board of Behavioral Health Examiners. The degree requirements are specified by the board and the program is designed to train practitioners who wish to practice marriage and family therapy.

Degree Requirements: 39 Credit Hours and a Master's Research Paper
The M.A.S. in marriage and family therapy program requires 1) the successful completion of a minimum of 39 credit hours, and 2) an applied project, including required course work and completion of 300 client-contact hours in a community internship placement approved by the M.A.S. in marriage and family therapy faculty. Internships are expected to last approximately 12 months. Students must maintain a GPA of 3.00 in all course work and satisfactorily meet the expectations of the agency supervising their internship. Foreign Language Requirements: None
Thesis Requirements: None
GRE Scores: GRE scores are waived for this program.
Transportation: Students are required to have a vehicle and a valid Arizona driver's license for internship placement.
Written/Oral Internship Examination: An internship entrance examination to demonstrate readiness for internship placement will be held at the end of the first eight-week semester.

Admission Requirements: Applicants must submit the online Graduate College application.
Admission to the program is determined by the following criteria:

- Admission to the ASU Graduate College.
- Official transcripts of the applicant's academic record.
- A personal statement.
- Three letters of recommendation from individuals familiar with the applicant's academic background.


## Contact Information:

Liberal Arts and Sciences, College of
School of Social and Family Dynamics
http://ssfd.clas.asu.edu/
SS 144
email@ssfd.info
480-965-6978

## Mathematics, MA (LAMATHMA)

Online Degree Search Title: Mathematics (MA)
Campus: TEMPE
Program Description: The M.A. is designed to increase mathematical knowledge beyond the traditional bachelor's degree in order to prepare students for careers requiring sophisticated mathematical skills. Students may choose to specialize in:

- Applied mathematics.
- Core mathematics areas.
- Mathematics education.
- Statistics.

Degree Requirements: 30 credit hours a Thesis and a Written Comprehensive Exam or 30 credit hours and 2 Written Comprehensive Exams or 30 credit hours and 2 Written Comprehensive Exams (MIP)
Thesis option
The degree program requires:

- Thirty credit hours of math or math-related graduate course work.
- Six of the 30 credit hours must consist of the thesis (599).
- The student must also complete one qualifying examination. See: for examination information.
- A final oral examination in defense of the thesis.

Nonthesis Option
The degree program requires:

- Thirty credit hours of math or math related graduate course work.
- Students must also complete two qualifying examinations. See the school website for examination information.

Admission Requirements: Applicants must submit:

- The Graduate College online application.
- The general GRE scores.
- Official transcripts.
- A statement of education and career goals.
- Three letters of recommendation.

Minimum background for consideration of admission to the master's program includes:

- A bachelor's degree in mathematics or a closely related area with a 3.00 GPA ( 4.00 scale).
- Course work in linear algebra (equivalent to ASU course MAT 342) and advanced calculus (equivalent to ASU course MAT 371).


## Contact Information:

Liberal Arts and Sciences, College of
School of Mathematical and Statistical Sciences
http://math.asu.edu/
PSA 216
grad@math.la.asu.edu
480-965-3951

## Mathematics, PHD (LAMATHPHD)

Online Degree Search Title: Mathematics (PhD)
Campus: TEMPE

Program Description: The Ph.D. is intended for students with superior mathematical ability. It emphasizes a solid mathematical foundation and promotes creative scholarship in mathematics and its many related disciplines.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation Program requirements:

- Each student must write a dissertation and defend it orally in front of five dissertation committee members.
- Students must pass two qualifier examinations, a written comprehensive examination and an oral dissertation prospectus. See the school website for examination information.
- Twelve credit hours of dissertation (799).

Admission Requirements: Applicants must submit:

- The Graduate College online application.
- The general GRE scores.
- Official transcripts.
- A statement of education and career goals.
- Three letters of recommendation.

Minimum background for consideration of admission to the Ph.D. program in mathematics includes:

- A bachelor's degree in mathematics or a closely related area with a 3.00 GPA ( 4.00 scale).
- Course work in linear algebra (equivalent to ASU course MAT 342) and advanced calculus (equivalent to ASU course MAT 371).


## Contact Information:

Liberal Arts and Sciences, College of
School of Mathematical and Statistical Sciences
http://math.asu.edu/
PSA 216
grad@math.la.asu.edu
480-965-3951

## Mathematics Education, PHD (LAMTEPHD)

Online Degree Search Title: Mathematics Education (PhD) (Mathematics and Statistics Dept - Grades 9-20)
Campus: TEMPE

Program Description: This interdisciplinary program accommodates students from a variety of academic backgrounds. It provides students with a solid foundation in graduate level mathematics as well as research skills and perspectives that will allow them to deal broadly with mathematics problems of:

- Curriculum.
- Equity.
- Learning.
- Policy.
- Teaching.
- Technology.

Conducting individual and collaborative research in the learning and teaching of mathematics is an integral part of the program.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation Program requirements:

- Each student must write a dissertation and defend it orally in front of five dissertation committee members.
- An oral comprehensive examination.
- An oral dissertation prospectus defense.
- Six credit hours of research (792).
- Twelve credit hours of dissertation (799).
- Twelve credit hours of Research in Undergraduate Mathematics Education (RUME) 1-4, with qualifying exams given in RUME 1 and 2.
- Two graduate math sequences from a list of options. See the school website for examination information.
- A written comprehensive examination.

See the department website for examination information.

## Admission Requirements: Applicants must submit:

- The Graduate College online application.
- The general GRE scores (students must be competitive in an applicant pool as evidenced by GRE scores of 700 quantitative and 500 verbal).
- Official transcripts.
- A statement of education and career goals.
- Three letters of recommendation (at least two of these must be from faculty).
- A writing sample.

Minimum background for consideration of admission to the Ph.D. program in mathematics education includes a master's degree in mathematics or a closely related area with a 3.00 GPA ( 4.00 scale), or a bachelor's degree in mathematics or a closely related area with exceptionally high grades and advanced course work in mathematics.

## Contact Information:

Liberal Arts and Sciences, College of School of Mathematical and Statistical Sciences
http://math.asu.edu/
PSA 216
grad@math.la.asu.edu
480-965-3951

## Medieval Studies (certificate), CERT (LAMEDSTCE)

Online Degree Search Title: Medieval Studies (Grad Certificate)
Campus: TEMPE

Program Description: The certificate program prepares students for advanced study or for academic positions by augmenting their skills and knowledge, thereby making them better equipped to meet the demands of their fields.

Degree Requirements: 18 credit hours and a Thesis (MA Certificate) or 27 credit hours a Prospectus and a Dissertation (PhD Certificate)

Medieval Latin: One semester (three to four credit hours) for M.A. students, two semesters (six to eight credit hours) for Ph.D. students, with proficiency attested either by achieving a grade of " $B$ " (3.00) or better in the Medieval Latin course(s) or by satisfactory performance on the Medieval/Renaissance Latin examinations offered by the Centre for Medieval Studies at the University of Toronto. (This requirement presupposes two years or 12 to 16 credit hours or equivalent of undergraduate training in Latin.)
Medieval vernacular language (e.g., Old English, Old Norse, Old French): two semesters (six credit hours) for M.A. students, three semesters (nine credit hours) for Ph.D. students.
Paleography: One semester (three credit hours).
Course work outside the major discipline: Two semesters (six credit hours) for M.A. students, three semesters (nine credit hours) for Ph.D. students.
Thesis or dissertation: In the area of medieval studies (three to six credit hours) for students not concentrating in the area for their degree. Students in the area fulfill the thesis requirement by writing a thesis or dissertation in the field.

Admission Requirements: All applicants to any certificate program must submit the Graduate College online application. Graduate students admitted to a degree program in any field may earn one of two M.A.- or Ph.D.-level certificates: the certificate in medieval studies or the certificate in Renaissance studies.

## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://acmrs.org/academic-programs/certificate
COOR 4432
acmrs@asu.edu
480-965-8097

## Microbiology, MS (LAMICROMS)

Online Degree Search Title: Microbiology (MS)
Campus: TEMPE

Program Description: The graduate programs are designed to prepare students for careers in teaching and in research on various aspects of microbiology in:

- Educational institutions.
- Government agencies.
- Industry.

Degree Requirements: 30 credit hours a Thesis an Oral Comprehensive Exam and a Written Comprehensive Exam or 30 credit hours an Oral Comprehensive Exam and a Written Comprehensive Exam (MIP) or 30 credit hours and a Thesis
A minimum of 30 credit hours of graduate credit are required, of which at least six hours must be thesis and research credit. The program is planned by the student in consultation with the supervisory committee. Students are expected to achieve, through 18 credit hours of course work, a fundamental understanding of the following subdisciplines:

- Bacterial genetics.
- Immunology.
- Molecular biology.
- Physiology and metabolism.
- Virology

If these course requirements are completed, no comprehensive examination is required. Alternatively, the student may demonstrate this fundamental understanding through the combination of a comprehensive examination, prepared by the student's supervisory committee, and 12 credit hours of formal course work.
A thesis is required along with a final oral examination covering the thesis and related subject matter.

Admission Requirements: Applicants must submit the Graduate College online application. Applicants should have:

- A 3.00 minimum GPA during the student's last two years or last 60 credit hours.
- Completed the requirements for an undergraduate major in biology, microbiology, chemistry or related discipline, with an adequate background in related courses in plant biology or mathematical and physical sciences.
- Minimum GRE scores in verbal (50th percentile), quantitative (70th percentile) and writing (5).
- Test of English as a Foreign Language (TOEFL) scores of 600 paper-based or 100 Internet-based, for non-native English speakers.


## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad/
LSC 226
sols.grad@asu.edu
480-965-1768

## Microbiology, PHD (LAMICROPHD)

Online Degree Search Title: Microbiology (PhD)
Campus: TEMPE
Program Description: The graduate programs are designed to prepare students for careers in teaching and in research on various aspects of microbiology in:

- Educational institutions.
- Government agencies.
- Industry.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The plan of study is designed by the student and the supervisory committee, consisting of a major professor and three additional faculty members. The program is tailored to the needs of the individual student.

- Eighty-four credit hours are required.
- A formal defense of the final written dissertation is required prior to graduation.
- The remainder hours are comprised of coursework showing breadth in microbiology and related disciplines, seminars and research.
- Twelve hours of dissertation are required.
- Written and oral comprehensive examinations are required in order to advance to candidacy.

Admission Requirements: Applicants must submit the Graduate College online application. Admission criteria are as follows.
Applicants should have:

- A 3.00 minimum GPA during the student's last two years or last 60 credit hours.
- Completed the requirements for an undergraduate major in biology, microbiology, chemistry or related discipline, with an adequate background in related courses in plant biology or mathematical and physical sciences.
- Minimum GRE scores in verbal (50th percentile), quantitative (70th percentile) and writing (5).
- Test of English as a Foreign Language (TOEFL) scores of 600 paper-based or 100 Internet-based for non-native English speakers.


## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad/
LSC 226
sols.grad@asu.edu
480-965-1768

Molecular and Cellular Biology, MS (LACELLMS)

Online Degree Search Title: Molecular/Cellular Biology (MS)

## Campus: TEMPE

Program Description: The M.S. in molecular and cellular biology prepares students for careers that span traditional disciplinary boundaries. The broad-based training provides the necessary skills for professional careers in academic institutions, governmental institutions and industry, particularly those related to health and chemical sciences.
The participating faculty in this interdisciplinary degree program are drawn primarily from the Department of Chemistry and Biochemistry and the School of Life Sciences, with additional faculty from the departments of:

- Bioengineering.
- Chemical and materials engineering.
- Kinesiology.
- Physics.
- Psychology.
- The School of Human Evolution and Social Change.

One striking aspect of studies in this broad area of biological science is the interdisciplinary nature of the field. Similar approaches and techniques are used for studies of biological systems whether they are:

- Animal.
- Bacterial.
- Plant.
- Viral.

Degree Requirements: 30 credit hours an Oral Comprehensive Exam and a Written Comprehensive Exam (MIP) or 30 credit hours and a Thesis
A minimum of 10 designated credit hours of molecular and cellular biology courses and six hours of research and thesis are required. The remaining courses are selected by the student in consultation with the supervisory committee.

Admission Requirements: All applicants must submit the Graduate College online application. Admission criteria are as follows:

- A 3.00 minimum GPA during the student's last two years or last 60 credit hours.
- Minimum GRE scores in verbal (50th percentile), quantitative (70th percentile) and writing (5).
- Test of English as a Foreign Language (TOEFL) scores of 600 paper-based or 100 Internet-based for non-native English speakers.


## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad/
LSC 226
sols.grad@asu.edu
480-965-1768

## Molecular and Cellular Biology, PHD (LACELLPHD)

Online Degree Search Title: Molecular/Cellular Biology (PhD)
Campus: TEMPE

Program Description: The Ph.D. in molecular and cellular biology (MCB) degree prepares students for careers that span traditional disciplinary boundaries. The broad-based training provides the necessary skills for professional careers in academic institutions, governmental institutions, and industry, particularly those related to health and chemical sciences.
This interdisciplinary degree program includes a doctoral concentration in computational biosciences. The participating faculty in this interdisciplinary degree program are drawn primarily from the Department of Chemistry and Biochemistry and the School of Life Sciences, with additional faculty from the departments of bioengineering, chemical and materials engineering, kinesiology, physics, psychology and the School of Human Evolution and Social Change. One striking aspect of studies in this broad area of biological science is the interdisciplinary nature of the field. Similar approaches and techniques are used for studies of biological systems whether they are:

- Animal.
- Bacterial.
- Plant.
- Viral.

The plan of study is designed by the student and the supervisory committee, consisting of a major professor and three additional faculty members; major professor and one other must be from MCB core faculty.

- Eighty-four credit hours are required.
- A formal defense of the final written dissertation is required prior to graduation.
- An oral and written comprehensive examination are required in order to advance to candidacy.
- Twelve credit hours of dissertation are required and the remaining hours are comprised of core course work, seminars and research.

Admission Requirements: All applicants must submit the Graduate College online application. Admission criteria are as follows:

- A 3.00 minimum GPA during the student's last two years or last 60 credit hours.
- Minimum GRE scores in verbal (50th percentile), quantitative (70th percentile), and writing (5).
- Test of English as a Foreign Language (TOEFL) scores of 600 paper-based or 100 Internet-based for non-native English speakers.

A GRE subject examination is strongly recommended.

## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad/
LSC 226
sols.grad@asu.edu
480-965-1768

## Museum Studies (certificate), CERT (LAMUSEUMCE)

Online Degree Search Title: Museum Studies (Grad Certificate)
Campus: TEMPE

Program Description: Museum anthropology encompasses theoretically oriented analyses of museums as cultural institutions (including the activities of staff members, visitors, represented peoples and all implicated others) as well as applied aspects of working in museums and related agencies.
Drawing on all subdisciplines of anthropology, special emphasis is placed on connecting material culture and ideation in a variety of institutional and field settings. Museum anthropology students apply museum philosophy, principles, practices and current critiques to explore the many dimensions of curatorship, including:

- Administration.
- Collections management.
- Educational programming.
- Exhibition work.
- Research.

Degree Requirements: 18 credit hours
Eighteen credit hours are required, which include 1) twelve hours of required course work, and 2) a six-credit-hour internship at an approved museum. All requirements for the certificate program should be completed within a three-year time limit with a cumulative grade point average of at least 3.00. Students who require more time to finish the program (because of their part-time status or lack of desirable/available courses) must obtain approval from the executive committee.
For students currently enrolled in an ASU graduate degree program, applicable certificate courses may count towards their degree program with the approval and consent of the degree granting program. The certificate may be taken independently or in conjunction with the M.A. in anthropology with a concentration in museum anthropology. For certificate students who are later admitted to an ASU graduate degree program, up to 12 credit hours from the certificate program may count towards their doctoral degree or up to nine credit hours may count towards their master's degree with the approval and consent of the degree-granting program.

Admission Requirements: Applicants must submit an online Graduate College application.
In addition to the general requirements for admission to the Graduate College, the School of Human Evolution and Social Change requires applicants to provide:

- A current curriculum vitae or resume.
- Official GRE scores.
- An optional sample of their written work.
- A statement of purpose outlining career and educational goals.
- Three letters of recommendation.
- Transcripts of all undergraduate and graduate course work.

Undergraduate course work in anthropology is not a prerequisite for admission, but is generally advisable. Students may be admitted without such a background and may be required to acquire knowledge of general anthropology in a manner to be specified at the time of admission.
For U.S. Department of Education Gainful Employment Program Disclosure information, see
http://catalog.asu.edu/files/shared/GE_Disclosure_LAMUSEUMCE.pdf.

## Contact Information:

Liberal Arts and Sciences, College of School of Human Evolution \& Social Change
http://shesc.asu.edu/graduate_studies
SHESC 233
shescgrad@asu.edu
480-965-6215

## Nanoscience, PSM (LANANPSM)

Online Degree Search Title: Nanoscience (PSM)
Campus: TEMPE

Program Description: The P.S.M. in nanoscience is a cohesive program of interdisciplinary courses that provide the knowledge base required for research and innovation in nanoscience. The program incorporates courses in:

- Chemistry and biochemistry.
- Electrical engineering.
- Materials science.
- Physics.

Commercial innovation is a particular target goal of the degree, including applications in:

- Healthcare.
- Nano-medicine.
- Optics.
- Semiconductor electronics and optoelectronics.
- Sensors.

The P.S.M. in nanoscience program is suitable for working professionals as well as for students who have obtained traditional B.S. or M.S. degrees in related fields.

Degree Requirements: 30 Credit Hours including the required course (NAN 593) and an Applied Project
Core courses account for 15 of the 30 credits, including society- and intellectual-property-based courses in addition to core science courses. Many of the requisite elective courses are currently offered within the Departments of Physics and Chemistry and Biochemistry. Most are cross-listed with other units.
The program includes a two-semester, student-centered professional seminar where the central role of the program as a vehicle for innovation emerges. During the spring semester and summer session, students conduct an individual applied project in association with a research group. The degree does not require a thesis. Rather, the applied project forms the basis of the final capstone presentation.
Core Courses (two three-credit hours each:
NAN 571 Quantum Physics for Nanoscience (three credits, fall semester)
NAN 593 Applied Project (three credits each, spring and final summer session)
NAN 505 Nanoscience and Society (two credits, final summer session)
NAN 506 Innovation and IP Management (two credits, final summer session)
NAN 591 Professional Seminar (two credits each fall and spring)
The NAN 505 and 506 courses are designated as alternate core courses, which in some years will be given within the professional seminar. Three alternate program options may be found at: http://nanoscience.asu.edu/content/psm-program-study-and-programoptions.

Throughout the program, students interact with research faculty and other students in a variety of disciplines related to nanoscience. Students also meet with visiting speakers and industrialists in the Professional Seminar, as well as other seminars. If taken full-time, the P.S.M. in nanoscience can be completed in twelve months (fall semester, spring semester and two summer sessions). Another option is our two-year, part-time program, which allows prospective students and their employers flexibility in scheduling their program of study.

## Admission Requirements:

- Applications must be submitted online with accompanying materials as specified on the Graduate College website.
- Applicants who hold a bachelor's degree from a regionally accredited institution in physics, chemistry or a related field are eligible to apply to the program.
- GRE scores are not required for application, but will be taken into consideration if submitted.
- This program also seeks to attract students already employed in related areas, and who wish to become knowledgeable and skilled in nanoscience.
- A Test of English as a Foreign Language (TOEFL) or equivalent score for non-native English speakers will be required when applicable.


## Contact Information:

Liberal Arts and Sciences, College of
Department of Physics
http://nanoscience.asu.edu/
PSF 470
nanoscience@asu.edu
480-965-3561

## Natural Science (Geological Sciences), MNS (LANATSCIMN)

Online Degree Search Title: Geological Sciences (MNS)
Campus: TEMPE
Program Description: The School of Earth and Space Exploration participates in the program leading to the M.N.S. in geological sciences. This interdisciplinary degree is designed to meet the needs of professionals seeking a graduate-level degree. The program offers the opportunity for interdisciplinary graduate training in the natural sciences (i.e., biological sciences, mathematics and physical sciences) and cognate areas.
The degree program is especially suited for individuals who desire professional training rather than research training. Because of designed flexibility, the degree also offers the opportunity for individualized professional graduate programs depending upon the backgrounds and goals of the students. Students are expected to emphasize course work in two or more areas of concentration. The program must be interdisciplinary.

Degree Requirements: 30 credit hours and an Applied Project
The supervisory committee is chosen by the student in conjunction with his/her advisor. The composition of the supervisory committee must reflect the interdisciplinary nature of the program. The student will develop a suitable applied project with the approval of the supervisory committee.
A program of study is recommended by the supervisory committee after conferring with the student. While the minimum number of credit hours required for the degree is 30 , more may be required by the supervisory committee depending upon the background of the student and the nature of the proposed program. In some cases undergraduate courses may be required to remove deficiencies. An applied project is required; however, a thesis is optional. For the thesis option, a final written or oral examination, or both, is required. Each examination is administered by the supervisory committee.

Admission Requirements: Applicants must submit the Graduate College online application.
In addition to the materials required by the ASU Graduate College, students applying for admission to the geological sciences M.N.S. program must submit:

- GRE scores (verbal, quantitative and analytical).
- A statement of purpose.
- Three letters of recommendation.

The application deadline for fall semester is January 15.

## Contact Information:

Liberal Arts and Sciences, College of

Department of Geological Sciences
http://sese.asu.edu/
PSF 686
seseinfo@asu.edu
480-965-5081

## Natural Science (Physics), MNS (LAPHYSMNS)

Online Degree Search Title: Physics (MNS)
Campus: TEMPE
Program Description: The Master of Natural Science (M.N.S.) curriculum provides interdisciplinary graduate training in physics, physical science or physics education. The degree is especially suited for high school science teachers who desire professional training rather than research training. Designed for flexibility, the curriculum also features individualized professional graduate programs. These programs are well-suited to the backgrounds and goals of students. Students are expected to emphasize course work in two or more areas of concentration. The program must be interdisciplinary.

Degree Requirements: 30 credit hours including the required course (PHS 593) and an Applied Project
A thesis is optional. A final written or oral examination, or both, is required. Each examination is administered by the supervisory committee.
Supervisory Committee:

- The graduate advisor and the student suggest names of persons to serve on the supervisory committee. The supervisory committee recommends the plan of study, after conferring with the student.
- The supervisory committee, consisting of three faculty members, is appointed by the dean of the Graduate College upon the recommendation of the chair of the Department of Physics.
- The supervisory committee is formed soon after the student has been admitted to the degree program and must reflect the interdisciplinary nature of the program.
- The supervisory committee may require more courses, depending upon the background of the student and the nature of the proposed program. In some cases undergraduate courses may be required to overcome deficiencies.

Teachers may enroll in these courses in order to earn credit towards re-certification, or to pursue an M.N.S. degree. For some courses, the prerequisites are two semesters of trigonometry-based college physics and an introductory calculus course. These courses are held during the summer. Depending on teacher interest, they may be offered at other times. Additional information about the M.N.S. for high school physics teachers is available at: http://physics.asu.edu/graduate/mns/overview.

## Admission Requirements:

- Applications must be submitted online with accompanying materials as specified by the Graduate College. To obtain application forms, access the department website.
- Requirements for admission are the availability of resources for the proposed program and a Department of Physics faculty member designated to serve as a graduate advisor.
- The submission of scores on the GRE (verbal, quantitative, and analytical) is required of all applicants. The GRE subject examination is not required.
- A Test of English as a Foreign Language (TOEFL) or equivalent score for non-native English speakers will be required when applicable.


## Contact Information:

Liberal Arts and Sciences, College of
Department of Physics
http://physics.asu.edu
PSF 470
physics.grad@asu.edu
480-965-3561

## Philosophy, MA (LAPHILMA)

Online Degree Search Title: Philosophy (MA)
Campus: TEMPE
Program Description: The M.A. in philosophy program is designed to prepare students to:

- Be employed in any areas that require critical and analytical thinking (such as medicine, law, government or publishing).
- Enter doctoral programs in philosophy at other institutions.
- Teach philosophy at the community college level.

Degree Requirements: 30 credit hours a Written Comprehensive Exam and an Oral Comprehensive Exam (MIP) or 30 credit hours and a Portfolio or 30 credit hours and a Thesis
There are two tracks of study for the M.A. in philosophy:
Thesis Option

- An additional six credit hours of PHI 599 Thesis is required (see Thesis Requirements below).
- Each student must take at least 24 credit hours of approved graduate-level courses, not including PHI 599 Thesis.
- Each semester's program of study must be approved by the Director of Graduate Studies.
- Each student is required to take an approved graduate-level course of three credit hours or more in each of the following four major areas and to obtain at least a " $B$ " (3.00) in each course: epistemology, history, metaphysics and value theory.
- Students must maintain a " $B$ " (3.00) average or better in their graduate course work and at least a " $B$ " (3.00) in the courses specified above.


## Thesis Requirements

- After the thesis committee is formed, the student shall, within a reasonable time, present a thesis prospectus to that committee for approval.
- Each student must complete six credit hours of PHI 599 Thesis; no more than six credit hours of PHI 599 may count toward the 30-credit-hour requirement.
- This written work must demonstrate the ability to carry out independent research in philosophy.
- At the end of the third semester of graduate work, each student shall form, with the approval of the Director of Graduate Studies, a thesis committee. One member, the "director," shall chair the thesis committee. At least two members of the thesis committee, including the director, shall be members of the philosophy department.
- Once the thesis committee has certified that the student's thesis is sufficiently complete, the student shall present an oral defense of the thesis. The committee may still require changes in the thesis after the oral defense.


## Nonthesis Option

- An additional three hours of PHI 592 Research is required to prepare the portfolio.
- Each semester's program of study must be approved by the director of graduate studies.
- Each student must take at least 27 credit hours of approved graduate-level courses, not including PHI 592 Research.
- Each student is required to take an approved graduate-level course of three credit hours or more in each of the following four major areas and to obtain at least a " $B$ " (3.00) in each course: epistemology, history, metaphysics, and value theory. An overall GPA of " $B$ " (3.00) is required.


## Portfolio Requirements

- A portfolio is required. This written work must consist of two papers from one of the major areas and must demonstrate the ability to carry out independent research in philosophy.
- Each student must complete three hours for PHI 592 Research; no more than three credit hours of PHI 592 may count toward the 30 -credit-hour requirement.
- At the end of the third semester of graduate work, each student shall form, with the approval of the Director of Graduate Studies, a portfolio committee. At least two members of the portfolio committee, including the director, shall be members of the philosophy department.
- After the portfolio committee is formed, the student shall, within a reasonable time, present a portfolio prospectus to that committee for approval.
- Once the portfolio committee has certified that the student's portfolio is sufficiently complete, the student shall present an oral defense of the portfolio. The committee may still require changes in the portfolio after the oral defense.

Admission Requirements: All applicants must submit the Graduate College online application. All applications for admission to the M.A. in philosophy must be accompanied by:

- The applicant's current curriculum vitae.
- The applicant's score in the GRE.
- Complete transcripts.
- A sample of philosophical writing.
- A statement of purpose.
- Three letters of recommendation from persons qualified to judge the applicant's potential for graduate work in philosophy.

The application deadline is Feb. 15.

## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://shprs.clas.asu.edu/philosophy
COOR 3312
philosophy@asu.edu
480-965-5778

## Philosophy, PHD (LAPHILPHD)

Online Degree Search Title: Philosophy (PhD)
Campus: TEMPE
Program Description: The Ph.D. in philosophy is designed to prepare students for careers:

- In areas that may benefit from advanced training in philosophy (such as law, civil service and publishing).
- As philosophers.
- As teachers of philosophy.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The student's plan of study is selected by the student in consultation with the graduate director and the supervisory committee and is approved by the supervisory committee.
Course requirements:
To insure breadth in the traditional areas of philosophy, students must pass with a grade of " B " (3.00) or better:

- One graduate course in history of philosophy (including areas such as the history of ethics, the history of political philosophy, and the study of particular historical figures).
- Two graduate courses in value theory (including areas such as philosophy of law, political philosophy, any branch of ethics, and feminist approaches to these areas).
- Two graduate courses in metaphysics and epistemology (including areas such as philosophy of language, philosophy of science and philosophy of mind).
- One graduate course in formal methods (including areas such as logic, the philosophy of mathematics, formal semantics, and formal approaches to rationality).


## Foreign Language Requirement:

None.
Comprehensive Examination:
Students will be examined in their area of specialization. Normally this occurs after the student has completed at least 60 hours of graduate coursework. The student, with the advice of his or her committee, shall construct a bibliography. Approval of the bibliography must be secured from the committee one semester in advance of the scheduled written examination. The committee shall provide the student some questions, from which the written examination questions will be taken, at least 30 days prior to the examination. The written examination shall occur on a single day and shall last no longer than 6 hours; 3 hours in the morning and 3 hours in the afternoon. The student may not use notes of any kind during the written examination. The oral examination normally follows the written examination within two weeks, depending on the availability of the committee.
Dissertation Prospectus:
Each doctoral candidate will prepare a prospectus of four to seven pages for the dissertation. The format and design of the prospectus will be determined by the candidate and committee chair. The prospectus should include the following:

- Bibliography.
- Discussion of the approach to the project.
- Discussion of relevant literature.
- Thesis statement.

Ph.D. students achieve candidacy status in a letter from the dean of the Graduate College upon passing the comprehensive examinations and successfully defending the dissertation prospectus.
Dissertation:
A dissertation based on original research is required. Research for the dissertation is supervised by a committee of at least three faculty members, appointed by the graduate director in consultation with the student. Students must enroll for a minimum of 12 credit hours of research or dissertation credit after admission to candidacy.
Final examination:
An oral examination in defense of the dissertation is required.

Admission Requirements: Applicants must submit the Graduate College online application. All applications for admission to the Ph.D. in philosophy must be accompanied by:

- The applicant's current curriculum vitae.
- The applicant's score in the GRE.
- Complete transcripts.
- A sample of philosophical writing.
- A statement of purpose.
- Three letters of recommendation from persons qualified to judge the applicant's potential for graduate work in philosophy.


## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://shprs.clas.asu.edu/philosophy
COOR 3312
philosophy@asu.edu
480-965-5778

## Philosophy (History and Philosophy of Science), MA (LAHPSMA)

Online Degree Search Title: Philosophy (History and Philosophy of Science) MA
Campus: TEMPE

Program Description: Nationally, there is great interest in science and in understanding the nature of science and the forces that change scientific research. The job market in philosophy is strong for philosophers of science (and especially in the life sciences) with some positions remaining unfilled even when the market is intensely competitive in other areas. In addition, the history and philosophy of science is becoming a strong disciplinary emphasis within growing professional societies.
Some programs elsewhere focus primarily on philosophy or primarily on history, but those that bring the two together are regarded among the strongest in each area. The objective here is to provide a program for students who come to history and philosophy of science from the humanities, and who seek a career based in philosophical analysis of the sciences. We have the research strength competitive with any international program.

Degree Requirements: 30 credit hours a Thesis and including a Capstone (HPS 551)
Graduate course work for the M.S. to include:
History of science (3)
Philosophy of science (3)
Topics in the history of science (3)
Topics in the philosophy of science (3)
Research methods in the history and philosophy of science (3)
Prospectus writing (3)
Research and thesis (12)

Admission Requirements: All applicants must submit the Graduate College online application. Applicants must possess a bachelor's degree from a regionally accredited university or the equivalent and have attained a cumulative GPA in their last 60 credit hours of their bachelor's degree of at least 3.00 ( 4.00 scale).

## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://sols.asu.edu/grad
LSC 284
SOLS@asu.edu
480-965-8927
Philosophy (History and Philosophy of Science), PHD (LAHPSPHD)
Online Degree Search Title: Philosophy (History and Philosophy of Science) PHD Campus: TEMPE

Program Description: This concentration combines solid training in the core areas of philosophy with an emphasis on interdisciplinary studies of the sciences, and their:

- Conceptual structure.
- Epistemology.
- History.
- Impacts on society.

This degree program is especially appropriate for students with a background in philosophy or those who wish to pursue a degree in philosophy, and who seek to broaden their disciplinary studies with an historical perspective.
Applicants will typically come from undergraduate programs that have included philosophical training or with a master's degree in philosophy. Science students are eligible as well, and will make up the core courses during their first years. Application is through the Department of Philosophy.
Nationally, there is great interest in science and in understanding the nature of science and the forces that change scientific research. The job market in philosophy is strong for philosophers of science (and especially in the life sciences) with some positions remaining unfilled even when the market is intensely competitive in other areas. In addition, the history and philosophy of science is becoming a strong disciplinary emphasis within growing professional societies. Some programs elsewhere focus primarily on philosophy or primarily on history, but those that bring the two together are regarded among the strongest in each area. The objective here is to provide a program for students who come to the history of philosophy and science from the humanities and who seek a career based in philosophical analysis of the sciences. The program has research strength competitive with any program internationally.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation Graduate course work includes:
History of science (3)
Philosophy of science (3)
Prospectus writing (3)
Research methods in the history and philosophy of science (3)
Dissertation (12)
Topics in the history of science (3)
Topics in the philosophy of science (3)
Additional courses required for the degree include:
Advanced Logic or approved equivalent (3)
Approved philosophy or other relevant courses (9)
A course in history of philosophy (3)
A course in value theory (3)
HPS 600 Lab (3 hours, one credit each)
Research or elective courses approved by dissertation chair (33)
Admission Requirements: All applicants must submit the Graduate College online application. Applicants must possess a bachelor's degree from a regionally accredited university or the equivalent and have attained a cumulative GPA in their last 60 credit hours of their bachelor's degree of at least 3.00 ( 4.00 scale).

## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://sols.asu.edu/grad
LSC 284
SOLS@asu.edu
480-965-8927

## Physics, MS (LAPHYSIMS)

Online Degree Search Title: Physics (MS)
Campus: TEMPE
Program Description: The M.S. in physics program provides graduate instruction and research experience appropriate to many physics-related careers. The structure of the program is flexible enough to allow a wide range of programs of study and a wide range of student backgrounds. It is also suitable for part-time study.

Completion of the program requires a minimum of two years, with students typically taking courses for the first three semesters and completing a research project in their final semester. The student defends a master's thesis at the end of the program.

Degree Requirements: 30 credit hours and a Thesis or 30 credit hours and a Written Comprehensive Exam (MIP) The M.S. in physics can emphasize either physics alone or physics in combination with other fields.

Admission Requirements: To be admitted to the M.S. in physics program without deficiencies, applicants should have adequate undergraduate preparation equivalent to an undergraduate major of 30 credit hours in physics and 20 credit hours in mathematics. Courses in analytic mechanics, electromagnetism and modern physics, including quantum mechanics, are particularly important. Students applying for admission must submit:

- Submit applications online with accompanying materials as specified on the Graduate College website.
- Test scores for the verbal, quantitative and analytical sections of the GRE. Submission of scores for the physics GRE subject test is recommended, although not mandatory.
- A Test of English as a Foreign Language (TOEFL) or equivalent score for non-native English speakers will be required when applicable.

Financial support in the form of teaching or research assistantships is contingent upon:

- Satisfactory performance in course work.
- Timely completion of the final examination for the M.S. degree.
- Need and availability of such support.

Students on probation are offered financial support only under exceptional circumstances.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Physics
http://physics.asu.edu/
PSF 470
physics.grad@asu.edu
480-965-3561

## Physics, PHD (LAPHYSIPHD)

Online Degree Search Title: Physics (PhD)
Campus: TEMPE

Program Description: The physics Ph.D. is intended for highly capable students having the interest and ability to follow a career in independent research. Graduates find positions in a variety of settings:

- Academic faculty.
- Administration.
- Government labs.
- Industrial labs.
- Management.

The recent advent of the graduate faculty initiative at ASU extends the spectrum of potential physics Ph.D. topics and advisors to include highly multidisciplinary Ph.D. projects that draw upon:

- Biochemistry.
- Biology.
- Chemistry.
- Electrical engineering.
- Materials science.
- Other related fields.

Consequently students and Ph.D. advisors can craft novel Ph.D. projects that transcend the classical palette of physics subjects.
Multidisciplinary expertise of this nature is increasingly vital to modern science and technology.
Current areas of particular emphasis within the department include:

- Biological physics.
- Cosmology.
- Electron diffraction and imaging.
- Nanoscale and materials physics.
- Particle physics and astrophysics.

The department has more than 100 doctoral students and more than 40 faculty members.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The physics Ph.D. program requires a student to:

- Complete 84 credit hours of course work.
- Pass a written and an oral comprehensive examination.
- Prepare and defend a Ph.D. dissertation.

Within the newly redesigned and modernized physics graduate curriculum, all Ph.D. students are required to take 18 credit hours of core physics courses, specifically:

PHY 521 Classical and Continuum Mechanics (first semester)
PHY 541 Statistical Physics (first semester)
PHY 500 Research Rotation I (first semester)
PHY 531 Electrodynamics (second semester)
PHY 576 Quantum Theory (second semester)
PHY 500 Research Rotation II (second semester)
Course work beyond these core courses is established by the student's Ph.D. advisor and supervisory committee, working in partnership with the student. The intent is to tailor the Ph.D. training to the specific research interests and aptitudes of the student while ensuring that each graduating student emerges with the expertise, core knowledge, and problem-solving skills that define a successful Ph.D. in physics.
Of particular note within the core courses are the PHY 500 Research Rotations, which are specifically designed to engage Ph.D. students in genuine, faculty-guided research starting in their very first semester at ASU.

Admission Requirements: Applicants to the Department of Physics Ph.D. program must hold at least a baccalaureate degree from a recognized institution and must have had adequate undergraduate preparation equivalent to an undergraduate major of 30 credit hours in physics and 20 credit hours in mathematics. Courses in analytic mechanics, electromagnetism and modern physics, including quantum mechanics, are particularly important.
Applicants must submit test scores for the verbal, quantitative, and analytical sections of the GRE. The subject GRE test scores should also be submitted; submission can be waived in extraordinary circumstances.
A Test of English as a Foreign Language (TOEFL) or equivalent score for non-native English speakers will be required when applicable. Applications must be submitted online with accompanying materials as specified on the Graduate College website.
Applicants requesting credit for prior graduate courses, taken either at ASU or elsewhere, must demonstrate mastery of the relevant course material to the graduate level standards of the Department of Physics.
Financial support in the form of teaching or research assistantships is contingent upon:

- Satisfactory performance in course work.
- Timely completion of examinations (including the written and oral Ph.D. comprehensive examinations).
- The need and availability of such support.

Students on probation are offered support only under exceptional circumstances. The period for which a Ph.D. candidate may receive financial support through the Department of Physics does not normally exceed six years.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Physics
http://physics.asu.edu/
PSF 470
physics.grad@asu.edu
480-965-3561

## Plant Biology, MS (LAPLBIOMS)

Online Degree Search Title: Plant Biology (MS)
Campus: TEMPE

Program Description: The plant biology graduate program is a multidisciplinary program that offers interdisciplinary training at the forefront of plant biology at levels of organization ranging from molecules to communities and landscapes. The M.S. program offers a broad range of research areas:

- Biochemistry and biotechnology.
- Cell and molecular biology.
- Ecology.
- Floristics.
- Systematics.

Although research training is focused primarily on acquiring basic knowledge, we offer opportunities for exposure to and participation in research with applied goals.

Degree Requirements: 30 credit hours an Oral Comprehensive Exam and a Written Comprehensive Exam (MIP) or 30 credit hours and a Thesis
The program must include:

- A minimum of three semester hours of research.
- One hour of participatory seminar (PLB 591).
- Six credit hours of thesis.

The program is planned by the student in consultation with the supervisory committee.
Admission Requirements: Applicants must submit the Graduate College online application. Applicants should have completed the following:

- A 3.00 minimum GPA during the student's last two years or last 60 credit hours.
- Minimum GRE scores in verbal (50th percentile), quantitative (70th percentile) and writing (five).
- Test of English as a Foreign Language (TOEFL) scores of 600 paper-based or 100 Internet-based, for non-native English speakers.
- An undergraduate major in the plant sciences, biology or related discipline.


## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad/
LSC 226
sols.grad@asu.edu
480-965-1768

## Plant Biology, PHD (LAPLBIOPHD)

## Online Degree Search Title: Plant Biology (PhD)

Campus: TEMPE

Program Description: The plant biology graduate program is a multidisciplinary program that offers interdisciplinary training at the forefront of plant biology at levels of organization ranging from molecules to communities and landscapes.
The doctoral program offers a broad range of research areas:

- Biochemistry and biotechnology.
- Cell and molecular biology.
- Ecology.
- Floristics.
- Systematics.

Although research training is focused primarily on acquiring basic knowledge, we offer opportunities for exposure to and participation in research with applied goals.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The program must include 12 hours of dissertation credit and at least 30 hours of formal graduate course work. Two hours of PLB 591 participatory seminar are included in the required course work.
Courses numbered 590 or 790 (reading and conference) are not considered formal courses. The program is planned by the student in consultation with a supervisory committee, consisting of a major professor and three additional faculty members.

Admission Requirements: Applicants must submit the Graduate College online application.
Applicants should have completed:

- A 3.00 minimum GPA during the student's last two years or last 60 credit hours.
- A GRE subject examination is strongly recommended.
- Minimum GRE scores in verbal (50th percentile), quantitative (70th percentile) and writing (five).
- Test of English as a Foreign Language (TOEFL) scores of 600 paper-based or 100 Internet-based.
- An undergraduate major in the plant sciences, biology, or related discipline, with an adequate background in related courses in chemistry, mathematical and physical sciences.


## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad/
LSC 226
sols.grad@asu.edu
480-965-1768

## Political Science, MA (LAPOLSCMA)

Online Degree Search Title: Political Science (MA)
Campus: TEMPE

Program Description: The M.A. in political science program provides advanced education for students preparing for teaching, research or applied careers in political science. It may be taken as a terminal program or as a step toward eventual fulfillment of the requirements for the Ph.D. Students who plan to obtain the Ph.D. at ASU should apply directly to the doctoral program.

Degree Requirements: 30 credit hours and a Portfolio or 30 credit hours and a Thesis or 30 credit hours and an Oral Comprehensive Exam (MIP)

- A minimum of 30 credit hours is required for the M.A. in political science.
- This program includes both a thesis and nonthesis option. If the thesis option is followed, the program must include a combination of three credit hours of research (POS 592) and three credit hours of thesis (POS 599) credit.
- All candidates must take POS 503 and the core courses in the student's major and minor fields.
- Additional hours must be taken in graduate-level courses and seminars each semester in the student's major field, minor field and electives until course work is completed.
- A maximum of six credit hours in approved courses may be taken outside the department.
- Six credit hours of reading and conference (POS 590) or independent study (POS 592) courses may count toward the 30-hour requirement.

Admission Requirements: Applicants must submit the ASU Graduate College online application.
In order to be considered for admission for the fall semester (there are no spring admissions), all application materials must be submitted to and received by the appropriate office (both the Graduate College and the Political Science program) by February 1. All required materials will be submitted through the Arizona State University Graduate College admission application. These include: Letters of Recommendation:
We require three letters of recommendation from people capable of evaluating your political science expertise. Please provide the name and email addresses of your recommenders as directed on the Graduate admission application form
Personal Statement:
Please write a personal statement (1-3 pages) indicating what area of political science you want to study and why.
If applicable, please include any honors, scholarships, prizes, honorary societies, etc. that you have received or belong to.
Prepare your statement using a word processor that can store your file in a .doc, .rtf, or .txt format. Upload your file on the Graduate
College Admission Application.
Writing Sample:
Please submit a writing sample (i.e., research paper) that best represents your thinking and writing skills in political science or a related subject. Prepare your statement using a word processor that can store your file in a .doc, .rtf, or .txt format. Upload your file on the Graduate College Admission Application.
Political Science Courses:
To assist in evaluating your candidacy, please list the titles and related information for all your previous undergraduate and graduate courses/coursework in political science and/or related fields.
Please complete the information in a table with the following column headings:

Crs Title | Undergrad Credit Hrs | Graduate Credit Hrs | Grade | Institution | Year
Save this file in a .doc, .rtf, or .txt format and upload it on the Graduate College Admission Application.
Test Scores:
GRE scores are required of all applicants. Please ensure that you 1) reported your GRE scores on the Application Form, and 2) have an official score report sent directly from ETS to the Division of Graduate Studies. In recent years the average GRE scores have been Verbal GRE: 647 and Math GRE: 671.
Photocopies are not acceptable.
Our institution code with ETS is 4007.
Undergraduate course work in political science is not a prerequisite for admission. However, M.A. students should have a basic understanding of elementary statistics and the undergraduate content of the political science fields of concentration that they wish to study. Students should allow sufficient time to acquire such a background.

## Contact Information:

Liberal Arts and Sciences, College of
School of Politics and Global Studies
http://pgs.clas.asu.edu/
COOR 6801
polsci@asu.edu
480-965-6551

## Political Science, PHD (LAPOLSCPHD)

## Online Degree Search Title: Political Science (PhD)

Campus: TEMPE
Program Description: The Ph.D. program is intended to develop scholars who demonstrate a high level of excellence in teaching and research as professional political scientists. It is distinguished by a wide variety of areas of specialization, including:

- American politics.
- Comparative politics.
- International relations.
- Political theory.
- Public policy.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation The Ph.D. program in political science requires:

- Eighty-four credit hours including 12 hours of dissertation research.
- A written comprehensive examination in the major and minor fields.
- An oral comprehensive examination covering the dissertation prospectus.
- POS 503 and 603 (part of the 84 hours).
- The supervisory committee of three members, including the committee chair from the student's major field.
- A formal oral defense of the dissertation.
- A maximum of 12 credit hours of approved course work outside the department but within ASU may count toward the 84 credit hours.
- A maximum of 30 credit hours from a post-graduate program elsewhere may be transferred in and counted toward the 84 credit hours.

Admission Requirements: Applicants must submit the ASU Graduate College online application.
In order to be considered for admission for the fall semester (there are no spring admissions), all application materials must be submitted to and received by the appropriate office (both the Graduate College and the political science program) by Feb. 1. All required materials will be submitted through the Arizona State University Graduate College admission application.
Letters of Recommendation:
We require three letters of recommendation from people capable of evaluating your political science expertise. Please provide the name and email addresses of your recommenders as directed on the Graduate admission application form.
Personal Statement:
Please write a personal statement (1-3 pages) indicating what area of political science you want to study and why.
If applicable, please include any honors, scholarships, prizes, honorary societies, etc. that you have received or belong to.
Prepare your statement using a word processor that can store your file in a .doc, .rtf, or .txt format.
Upload your file on the Graduate College Admission Application.
Writing Sample:

Please submit a writing sample (i.e. research paper) that best represents your thinking and writing skills in political science or a related subject. Prepare your statement using a word processor that can store your file in a .doc, .rtf, or .txt format. Upload your file on the Graduate College admission application.
Political Science Courses:
To assist in evaluating your candidacy, please list the titles and related information for all your previous undergraduate and graduate courses/coursework in Political Science and/or related fields.
Please complete the information in a table with the following column headings:
Crs Title | Undergrad Credit Hrs | Graduate Credit Hrs | Grade | Institution | Year
Save this file in a .doc, .rtf, or .txt format and upload it on the Graduate College admission application.
Test Scores: GRE scores are required of all applicants. Please ensure that you 1) reported your GRE scores on the application form, and 2) have an official score report sent directly from ETS to the Division of Graduate Studies. In recent years the average GRE scores have been Verbal GRE: 647 and Math GRE: 671.
Photocopies are not acceptable.
Our institution code with ETS is 4007.
English Proficiency:
If your native language is other than English, you are required to provide proof of English proficiency to the Division of Graduate Studies. Please see http://graduate.asu.edu/admissions/international/english_proficiency.
In addition to these documents the Graduate College requires an application fee, official transcripts, etc., Please see:
http://graduate.asu.edu/admissions/how_to_apply for more instructions.
For additional requirements for International students, please see: http://graduate.asu.edu/admissions/international
Applicants for financial aid should also complete and submit the application form for graduate assistantships by Feb. 1.
Ph.D. students should have a basic understanding of elementary statistics and the content of the areas of concentration that they wish to study. Students should allow for sufficient time to acquire such a background.

## Contact Information:

Liberal Arts and Sciences, College of
School of Politics and Global Studies
http://pgs.clas.asu.edu/
COOR 6801
polsci@asu.edu
480-965-6551

## Psychology, PHD (LAPSYCHPHD)

Online Degree Search Title: Psychology (PhD)
Campus: TEMPE
Program Description: The Department of Psychology offers doctoral programs designed to provide outstanding training in innovative research, methodology and the application of psychological principles to a wide variety of human conditions. The department is organized into six major areas of interest:

- Behavioral neuroscience.
- Clinical.
- Cognition, action and perception.
- Developmental.
- Quantitative.
- Social psychology.

Students pursue their graduate studies within one of these six areas, and each area determines the basic curriculum for their graduate program. There is, however, substantial opportunity to integrate courses of study across areas in the department. Further, specialized emphases are available that integrate across programs in the university (e.g., integrating cognition, action and perception studies with arts, media and engineering; integrating psychology and law).
At the core of doctoral training in psychology is an emphasis on the development of skill in research and quantitative methods.
Faculty in all six areas are actively engaged in major research programs. These theoretically grounded research programs address the breadth of psychological processes:

- Cognitive processes (e.g., attention, language) as they occur within the context of perception and action, personality and issues of stigma and prejudice.
- Cultural influences on psychological processes.
- Evolution and behavior.
- Individual resilience.
- Lifespan developmental aspects of emotion and cognition.
- Neurobiological and psychosocial processes that underlie behavior and health (e.g., drug abuse, stress, heart disease).
- Prevention of child mental health problems.
- Women's issues.

A particularly unique strength of the department of psychology is the wealth of outstanding faculty whose specialization is quantitative methods. A breadth of courses and experiences in quantitative methods are available that are well integrated into the areas of research that characterize the department, and offer students a rare opportunity to develop expertise in this critical domain.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation In addition to a core curriculum, students take courses related to their area of interest as determined in consultation with their supervisory committees. All doctoral students complete 12 dissertation credit hours. Requirements vary across training areas.

Admission Requirements: The Graduate College online application, including all letters and supporting documents, must be received by Dec. 15 for applicants to the clinical program, and by January 5 for all other applicants (behavioral neuroscience, developmental, quantitative, social psychology, cognition, action, and perception).

- Scores on the GRE.
- A statement of purpose.
- Test of English as a Foreign Language (TOEFL) for international students.
- Three letters of reference.
- Transcripts.

In addition to the materials sent to the Graduate College, the applicant must send another set of materials to the Department of Psychology as follows:

- GRE scores (unofficial copies are acceptable).
- Original letters of recommendation from three references.
- Statement of purpose.
- Transcripts (unofficial copies are acceptable).

Send these directly to:
Coordinator of Graduate Admissions
Psychology Department
P.O. Box 871104

Arizona State University
Tempe, AZ 85287-1104

## Contact Information:

Liberal Arts and Sciences, College of
Department of Psychology
http://psychology.clas.asu.edu/
PSY 296
psygrad@asu.edu
480-965-7606

## Psychology (Quantitative Research Methods), PHD (LAPSYQUPHD)

## Online Degree Search Title: Quantitative Research Methods (PhD)

Campus: TEMPE

Program Description: The quantitative concentration of the Ph.D. in psychology focuses on the broad class of quantitative and methodological issues that arise in the conduct of both basic and applied psychological research. There are seven core faculty members in the quantitative concentration, of whom five are also affiliated with a substantive area. This dual affiliation supports the training of students of quantitative methods against a backdrop of methodological issues associated with the development of the substance of psychological science. The quantitative concentration is committed to training the next generation of psychological methodologists, who will make contributions in developing methods in the areas of measurement, design and analysis and evaluating the utility of new and existing methods for use in psychological research.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

The quantitative curriculum is structured into a series of progressively more advanced courses. New quantitative/methodological courses may be implemented under an omnibus number (PSY 591) at the interest of the faculty. The current requirements are as follows:
PSY 530 Analysis of Variance
PSY 531 Multiple Regression Analysis
PSY 532 Analysis of Multivariate Data
PSY 533 Structural Equation Modeling
PSY 534 Psychometric Methods
PSY 555 Experimental and Quasi-Experimental Designs
PSY 591 Quantitative Seminar (annual)
Four psychological methodology electives
Six credits of substantive course work
Six credits in additional substantive or methodological electives
Six credits of PSY 592 (master's thesis)
Twelve credits of PSY 792 (post-master's research)
Twelve credits of PSY 799 (dissertation)
Admission Requirements: All applicants must submit the Graduate College online application. Students are admitted directly to the Ph.D. program, with the expectation that the student will progress through a master's degree to the Ph.D. Other required materials include:

- Application fee.
- Application form.
- An applicant response form.
- A brief statement of purpose (900 words or less).
- GRE scores.
- Official transcripts of all previous undergraduate and graduate study.
- Three letters of recommendation, preferably at least two from individuals within the academic community.

In addition to the materials sent to the Graduate College, the applicant must send another set of materials to the Department of Psychology as follows:

- GRE scores (unofficial copies are acceptable).
- Original letters of recommendation from three references.
- Statement of purpose.
- Transcripts (unofficial copies are acceptable).

Send these directly to
Coordinator of Graduate Admissions
Psychology Department
Arizona State University
P.O. Box 871104

Tempe, AZ 85287-1104

## Contact Information:

Liberal Arts and Sciences, College of
Department of Psychology
http://psychology.clas.asu.edu/
PSY 296
psygrad@asu.edu
480-965-7606

## Religious Studies, MA (LARELIGMA)

Online Degree Search Title: Religious Studies (MA)
Campus: TEMPE
Program Description: The M.A. in religious studies emphasizes the comparative study of religions. The program seeks to understand the phenomena of religion across a wide spectrum of cultural contexts and historical periods. Reflecting the different interests and areas of expertise of the faculty, the curriculum incorporates a variety of approaches to the subject:

- Cultural.
- Historical.
- Literary.
- Sociological.
- Theological.

Primary areas of emphasis include:

- Christianity.
- Buddhism.
- Hinduism.
- Islam.
- Judaism.
- Modern Western Religious Thought.
- Religion in the Americas (African-American, Latin American, Native American and North American religions).
- Religions in Asia.

Comparative themes and current theories are central to the curriculum. These include but are not restricted to:

- Ethnography and anthropology of religion.
- Nationalism and ethnicity.
- Popular religion.
- Post-coloniality.
- Religion and gender.
- Religion, secularism(s), and modernity.
- Religious conflict and peace studies.
- Ritual studies.
- Trans-border studies.

Although students often concentrate upon a single religious tradition for their thesis work, the program seeks to provide a broadly comparative understanding of religions, not simply a specialist's training in a single tradition.

Degree Requirements: 30 credit hours a Thesis and a Foreign Language Exam or 30 credit hours a Thesis and a Foreign Language Exam (MIP) or 30 credit hours including the required course (REL 593) an Applied Project and a Foreign Language Exam or 30 credit hours including the required course (REL 593) an Applied Project and a Foreign Language Exam (MIP)

## Thesis Option

This option is recommended for students intending to seek admission to a doctoral program upon completion of the M.A. or planning to teach in the discipline at community colleges. For the thesis option, the student must satisfy the following requirements:

- An oral defense of the thesis.
- Reading knowledge of all languages relevant to the proposed thesis topic.
- A thesis that earns six credit hours of 599 thesis credit.
- Twenty-four hours of course work, including six hours in methods and theory (REL 501 and 502), six hours of graduate seminar (REL 591), offered each semester on varying topics within the academic study of religion and three hours of research (REL 592) to prepare the thesis proposal.


## Portfolio Option

This option is recommended for students intending to augment their primary area of expertise and professional training in fields such as:

- Counseling.
- Journalism.
- Law.
- The ministry.
- Social work.
- Teaching K-12.

For the portfolio option, the student must satisfy the following requirements:

- An oral defense of the portfolio.
- A portfolio consisting of three publishable papers: one on theory and method, one on the student's minor area of study, and one on the major area of study.
- Reading knowledge of a foreign language relevant to the proposed area of concentration.
- Thirty hours of course work, including six hours in methods and theory (REL 501, 502), six hours of graduate seminar (REL 591), four courses in a major area of concentration and two courses in a minor area.

Admission Requirements: Applicants must submit the Graduate College online application. To be eligible for admission to the graduate program in religious studies, an applicant must submit the following:

- Email addresses of three academic references. Referees will be contacted by the Graduate College to complete a reference questionnaire.
- Evidence of having completed the equivalent of 15 hours of undergraduate work in the study of religions, including advanced courses in both Western and Asian or other non-Western religions. Students without the necessary background in religious studies may remove deficiencies by taking additional specified courses (which may not count toward the fulfillment of degree requirements) at the beginning of their program of study.
- A statement of purpose of approximately 1,000 words outlining the academic background, career goals and specific area of interest in religious studies in relation to fields offered by the faculty, to be sent to the graduate coordinator of the department.
- Test scores from the GRE.
- A writing sample.


## Complete applications are due by January 1.

## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://shprs.clas.asu.edu/masters_rel
COOR 3312
Religious.Studies@asu.edu
480-965-5778

## Religious Studies, PHD (LARELIGPHD)

Online Degree Search Title: Religious Studies (PhD) Campus: TEMPE

Program Description: The academic study of religion is a central component of the humanities and has become increasingly recognized as a critical tool in understanding society and politics in a globalized world. The Ph.D. program has two main goals:

- To provide supplementary training for graduate students in a range of related programs (including history, anthropology, political science, journalism, secondary education and justice studies) who would benefit from greater expertise regarding the nature and role of religion around the world.
- To train graduate students for careers as scholars and teachers in the academic study of religion.

Doctoral tracks in the study of religion approach the study in a variety of contexts. Specifically offered are tracks in:

- Islam in Global Contexts.
- Religion in the Americas.
- Religion in Asia.

Degree Requirements: 84 credit hours a Foreign Language Exam(s) a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

## Course Work

The plan of study must contain a minimum of 84 credit hours, including 12 hours of dissertation. Courses and research hours are approved by the student's supervisory committee.

Admission Requirements: All applicants must submit the Graduate College online application. In addition to the general requirements for admission to the Graduate College, applicants must also submit:

- E-mail addresses of three academic references. Referees will be contacted by the Graduate College to complete a reference questionnaire.
- GRE scores.
- A statement of purpose of approximately 1,000 words.
- Test of English as a Foreign Language (TOEFL) for international non-native English speakers.
- A writing sample.

The application deadline is Jan. 1.

## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://shprs.clas.asu.edu/doctorate_rel
COOR 3312
gradrs@asu.edu
480-965-5778

## Renaissance Studies (certificate), CERT (LARENAISCE)

Online Degree Search Title: Renaissance Studies (Grad Certificate)
Campus: TEMPE
Program Description: The certificate program prepares students for advanced study or for academic positions by augmenting their skills and knowledge, thereby making them better equipped to meet the demands of their fields.

Degree Requirements: 18 credit hours and a Thesis (MA Certificate) or 27 credit hours a Prospectus and a Dissertation (PhD Certificate)
Medieval/Renaissance Latin: One semester (three to four credit hours) for M.A. students, two semesters (six to eight credit hours) for Ph.D. students, with proficiency attested either by achieving a grade of "B" (3.00) or better in the medieval Latin course(s) or by satisfactory performance on the Medieval/Renaissance Latin examinations offered by the Centre for Medieval Studies, University of Toronto. This requirement presupposes two years or 12 to 16 credit hours or equivalent of undergraduate training in Latin.
Early modern language at the upper division level: Two semesters (six credit hours) for M.A. students; three semesters (nine credit hours) for Ph.D. students. Literature or linguistics classes may apply.
Paleography: One semester (three credit hours).
Course work outside the major discipline: Two semesters (six credit hours): for M.A. students, three semesters (nine credit hours) for Ph.D. students.
Thesis or dissertation: In the area of Renaissance studies (three to six credit hours): for students not concentrating in the area for their degree. Students in the area fulfill the thesis requirement by writing a thesis or dissertation in the field.

Admission Requirements: All applicants to graduate certificate programs must submit the Graduate College online application. Graduate students admitted to a degree program in any field may earn one of two M.A.- or Ph.D.-level certificates: the certificate in medieval studies or the certificate in Renaissance studies.

## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://acmrs.org/academic-programs/certificate
COOR 4432
acmrs@asu.edu
480-965-8097

## Scholarly Publishing (certificate), CERT (LASCHPUBCE)

Online Degree Search Title: Scholarly Publishing (Grad Certificate)
Campus: TEMPE
Program Description: The scholarly publishing certificate program offers training in publishing studies to graduate students in any discipline. The program prepares students to enter scholarly publishing at university presses, in higher education, at textbook and reference publishers or to engage in publishing activities encountered as academic professionals, such as journal publishing, book publishing, or documentary editing.

Degree Requirements: 23 credit hours
Course work includes four required core courses and electives from a variety of disciplines. The certificate requirement includes a summer internship. Some courses may be applied to both the certificate and the student's degree program.

Admission Requirements: Graduate students in any discipline may pursue a certificate in scholarly publishing in conjunction with their degree programs. The program is also open to students who already hold graduate degrees. Scholarly Publishing Certificate applicants are required to submit a Graduate College online application solely for the Scholarly Publishing program, regardless of any applications to other programs. Please submit the following materials:

- A resume or curriculum vitae. Upload it into the online application.
- A letter of intent. Should be addressed to the history review committee explaining your scholarly background and training, your career goals, and why you want to pursue graduate study at ASU (about 500 words in length).
- Three reference letters. Students should contact their references and inform them that they will be contacted by the Graduate College and asked to submit an electronic recommendation. Students are required to submit a minimum of three e-mail addresses from faculty or others qualified to speak to the student's suitability for graduate study in scholarly publishing.
- Transcripts. Should be mailed to the Graduate College at the following address. (It is not necessary to mail transcripts to the history program). Arizona State University, Graduate College, 1120 S. Cady Mall INTDSB-B256, Tempe, AZ 85287-1003.
- A writing sample. Submit a sample of your written work electronically. The writing sample may be an article (published or unpublished), a research paper, or any other extended example of your expository skill no longer than 35 double-spaced pages in length. Longer writing samples should not be submitted without first consulting the Graduate Director. Documents should not be password protected. Acceptable file types are .rtf, .pdf, and .doc.

The application deadline is Jan. 1 for enrollment in August. Applications will also be reviewed after the deadline if space remains in the class.
For U.S. Department of Education Gainful Employment Program Disclosure information, see
http://catalog.asu.edu/files/shared/GE_Disclosure_LASCHPUBCE.pdf.

## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://shprs.clas.asu.edu/scholarlypublishing
COOR 3312
scholarly.publishing@asu.edu
480-965-5387

## Science and Technology Policy, PSM (LAHSDPSM)

Online Degree Search Title: Science and Technology Policy (PSM)
Campus: TEMPE
Program Description: The ASU Professional Science Master's in science and technology policy provides professional education for students seeking advanced public, nonprofit or private sector careers in science and technology policy and related fields in the United States or abroad. Students will learn essential skills, knowledge and methods for analyzing innovation, expertise and largescale technological systems. Particular emphasis is placed on the political and societal contexts and impacts of science and technology policy. The program is a one-year cohort-based program designed to attract students of the highest caliber in their early to mid-careers.
Students will acquire the following knowledge and skills:

- Analysis of knowledge systems supporting policy decisions.
- Analysis of scientific and technological innovation systems.
- Analysis of the social and policy dimensions and implications of large-scale technological systems.
- Skills in collaborative, team-based analysis of science and technology policy problems.
- Skills in effective professional communication.
- Understanding of the theoretical foundations of the interactions among science, technology and society.
- Understanding of U.S. and, where appropriate to a student's career interests, international science and technology policies and the policy processes that generate them.

Degree Requirements: 30 credit hours including the required course (HSD 593) and an Applied Project

- Six credit hours of required core courses.

HSD 501 Science and Technology Policy (3)
HSD 502 Advanced Science and Technology Policy (3)

- Six credit hours of restricted electives from a list provided by the program chair.
- Six credit hours of applied policy analysis courses.

HSD 593 Applied Project in Science and Technology Policy (3 credits)
HSD 505 Science and Technology Policy Workshop in Washington, DC (3 credits)

- Three credit hours of internship.

HSD 584 Internship in Science and Technology Policy (3 credits)

- Nine credit hours of electives.

Admission Requirements: All applicants must submit the Graduate College online application. To be eligible for admission, students are required to hold a minimum of a bachelor's degree (or equivalent) or a graduate degree from a regionally accredited college or university or of recognized standing. Students are also strongly encouraged to have prior relevant education, training or experience in science and technology policy. Students must also hold a minimum of a 3.00 cumulative GPA (on a 4.00 scale) in the last 60 hours of a student's first bachelor's degree program. The GRE test is required for admissions. Students may enroll only in the fall semester of each year.

## Contact Information:

Liberal Arts and Sciences, College of
Dean, College of Liberal Arts and Sciences
http://sciencepolicy.asu.edu
INTDS B 366
sciencepolicy@asu.edu
480-727-9498

## Socio-Economic Justice (certificate), CERT (LAECJUGRCT)

Online Degree Search Title: Socio-Economic Justice (Grad Certificate)
Campus: TEMPE
Program Description: The graduate certificate in socio-economic justice addresses the social and political implications of global and local economies for economic inequality and social justice. This transdisciplinary program fuses interests in political economy, socioeconomic inequality and analysis of related policies and their consequences for social welfare in areas of income, housing, employment and education. This certificate complements the current graduate curriculum at ASU and is structured to allow students to draw upon a combination of core courses in justice and social inquiry, and course work from units from across the ASU campuses. Our approach is transdisciplinary (i.e., inclusive of courses in a variety of disciplines but transcending disciplinary boundaries through an integrative core curriculum), intersectional (i.e., considering gender, race, class, nation and sexual relations) and transnational (courses that examine global and local concerns). It will strengthen student understanding of the justice implications of the convergence of social and economic inequalities in the global economy.

Degree Requirements: 16 credit hours
This includes two core (required) courses, three elective courses and a one-credit hour culminating experience that includes a research paper.
Required Certificate Core Courses

1. Economic Justice. (3)

Students must select one of the following courses:
JUS 550 Gender, Race and Economic Justice
JUS 660 Globalization and Socio-Economic Justice
2. Conducting Research in Communities. (3)

Students must select one of the following courses:
JUS 633 Community Research
JHR 525 Action Research
3. Elective Courses. (9)

Students must select three electives on socio-economic justice from among the following courses:
ASB 591 Environmental Justice and the City
ASB/POL 447 Citizenship, Nationalism and Identity*
JHR 510 Problem Based Seminar: Oaxaca; Migration, Gender and Human Rights
JHS 511 Community Embedded Seminar: Contemporary Slavery and Trafficking
JHR 525 Action Research
JUS 405 Economic Justice*

JUS 415 Gender and International Development*
JUS 494 Advanced Topics in Global Justice*
JUS 591 Family Work and Justice
JUS 550 Gender, Race and Economic Justice
JUS 555 Migration, Immigration and Justice
JUS 591 Globalization and Livable Cities
JUS 591/691 Difference, Citizenship and Globalization
JUS 591/691 Governance, Citizenship and Justice
JUS 660 Globalization and Socio-Economic Justice
JUS 633 Community Research
POS 598 Urban Politics and Policy
POS 598 North-South Relations
SOS 514 Human Dimensions of Sustainability
SWG 531 Social Policy and Services
SWG 533 Diversity and Oppression
SWG 591 Border Family and Community Asset Building Policies
WST 598 Gender and Globalization in Latin America
*Note: Only one 400-level courses listed above is allowed.
Must have prior approval from the director of the certificate in economic justice program for any 400 -level course.
4. Culminating Experience. (1)

This capstone writing/research paper synthesizes the student's disciplinary interests with their implications for socio-economic justice. Students register for JUS 590 Readings and Conference.

Admission Requirements: All applicants must submit the Graduate College online application.
Graduate students who are regularly admitted to a graduate degree program at ASU or students who have completed a bachelor's degree at a regionally accredited U.S. institution or equivalent are welcome to apply for the socio-economic justice graduate certificate program. To be considered for admission, students should submit the following documents to the justice and social inquiry program office:

- Applicants must meet the Graduate College criteria for admission to a graduate certificate program at ASU.
- At least one letter of recommendation.
- A statement of purpose for pursuing the certificate.
- A writing sample demonstrating excellent writing and analytical skills.
- Students who are already enrolled in an ASU graduate program must submit an unofficial copy of their graduate transcripts and be in good standing with the ASU Graduate College; students who are not regularly admitted to an ASU graduate program must submit an official transcript showing the completion of a bachelor's degree in any academic field with a junior/senior GPA of at least 3.00 or equivalent.


## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://justice.clas.asu.edu/graduate
WILSN 217
graduate.justice@asu.edu
480-965-6008

## Sociology, MA (LASOCMA)

Online Degree Search Title: Sociology (MA)
Campus: TEMPE
Program Description: This degree program provides advanced training for those preparing for teaching, research or applied careers in sociology, and may be taken either as a terminal program or as a step toward eventual fulfillment of requirements for the Ph.D.

Degree Requirements: 32 credit hours and a Master's Research Paper (MIP) or 32 credit hours and a Thesis
The M.A. in sociology program includes:

- A 10 credit hour core curriculum.
- The balance taken from substantive courses.
- One credit hour of sociology as a profession (SOC 503).
- Six credit hours earned through a thesis (SOC 599).
- Six credit hours of research methods and statistics (SOC 500 and 505).
- Three credit hours of theory (SOC 585).

Admission Requirements: All applicants must submit a Graduate College online application.
Admission to the program is determined by the following criteria:

- A current resume or curriculum vitae.
- GRE scores (verbal, quantitative and writing).
- A personal statement detailing professional goals and research experiences.
- Three letters of appraisal from persons familiar with the applicant's academic background.
- Valid transcripts of the student's academic record.
- A writing sample.

The application deadline is Jan. 15.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social and Family Dynamics
http://ssfd.clas.asu.edu/sociology
SS 144
email@ssfd.info
480-965-6978

## Sociology, PHD (LASOCPHD)

Online Degree Search Title: Sociology (PhD)
Campus: TEMPE
Program Description: This degree provides advanced training in theory, research methodology and substantive fields to prepare sociologists for teaching and research with special emphasis on family, medical sociology and demography.

Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation
This degree program requires:

- A dissertation.
- Eighty-four credit hours.
- An oral comprehensive examination.
- A written comprehensive examination.

Thirty credit hours from a previously awarded master's degree can be applied to the 84-credit-hour requirement.
The Ph.D. requires 54 credit hours beyond the master's degree. Three credit hours of each, theory, methods and statistics are required, and 24 credit hours are earned through dissertation and research. The remaining 21 credit hours are in substantive courses reflecting the student's specialization.
First-year Ph.D. students are required to take SOC 503 Sociology as a Profession. A minimum of 30 credit hours of the approved Ph.D. program, exclusive of dissertation and research hours, must be completed after admission to the Ph.D. program.

Admission Requirements: Applicants must submit the Graduate College online application. Admission to the program is determined by the following criteria:

- A current resume or curriculum vitae.
- GRE scores (verbal, quantitative and writing).
- A personal statement detailing professional goals and research experiences.
- Three letters of appraisal from persons familiar with the applicant's academic background.
- Valid transcripts of the applicant's academic record.
- A writing sample.

Applicants should have an M.A. or its equivalent in sociology or a related field. The option is available for a few outstanding undergraduates to apply directly to the Ph.D. program. These students must obtain an M.A.-in-passing.
All applications are due Jan. 15.

## Contact Information:

Liberal Arts and Sciences, College of

School of Social and Family Dynamics
http://ssfd.clas.asu.edu/sociology
SS 144
email@ssfd.info
480-965-6978

## Spanish, MA (LASPANMA)

Online Degree Search Title: Spanish (MA)
Campus: TEMPE
Program Description: M.A. in Spanish programs combine Spanish, Spanish American and Mexican American literature, linguistics and culture. All programs have a research component: candidates for the M.A. in Spanish write a thesis.
The M.A. has two concentrations: literature and culture, and linguistics. It is possible to concentrate courses in one of two subconcentrations within the linguistics track: sociolinguistics and second language acquisition/applied linguistics. Students admitted to the M.A. program with a major in secondary education may elect Spanish as the subject matter field.

Degree Requirements: 30 credit hours a Thesis and a Written Comprehensive Exam
Students seeking an M.A. in Spanish should consult with the respective Graduate Representative.
Comprehensive Examination: all candidates are required to pass a comprehensive written examination designed to evaluate the candidate's knowledge in the area of specialization. A reading list is provided as a guide to preparation for this examination.
Thesis: all candidates must write a thesis.

Admission Requirements: Students interested in applying to this program must submit a Graduate College online application. Submit the following documentation to the academic unit:

- An academic writing sample. For example: an academic term paper, critical paper or research paper approximately 10-25 pages prepared in an upper division or graduate Spanish course.
- A personal statement - no more than two pages, summarizing past educational experiences and goals in pursuing a graduate degree (preferably in Spanish).
- A resume if interested in a Teaching Assistantship.
- Three letters of recommendation.*
*If a candidate is interested in obtaining a teaching assistant/associate position, the two letters of recommendation included with their application to the program should also address his/her competence in Spanish and his/her ability (potential or demonstrated) to conduct a university-level language course. If the authors of the academic letters are unfamiliar with a candidate's teaching ability, a separate letter addressing this issue from a more appropriate source should be included in the application package. See http://silc.clas.asu.edu/graduate/degrees/ma-spanish for more information.


## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/graduate
LL 440
silc@asu.edu
480-965-6281
Spanish, PHD (LASPANPHD)
Online Degree Search Title: Spanish (PhD)
Campus: TEMPE
Program Description: The School of International Letters and Cultures offers a graduate program in Spanish leading to the Ph.D. in Spanish with concentrations in literature and culture studies.

Degree Requirements: 84 credit hours two Foreign Language Exams a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation
The Ph.D. in Spanish consists of:

- The candidate must present an acceptable dissertation based on original investigation. The dissertation must represent a significant contribution to knowledge and demonstrate the candidate's ability to do independent, scholarly research.
- Each candidate is expected to demonstrate a reading knowledge of two languages other than English and Spanish. The language requirements must be satisfied before the candidate is eligible to take the comprehensive examination.
- Eighty-four credit hours of graduate-level work.
- A final oral examination is required. This examination covers the subject matter of the dissertation and appropriate field.
- Twelve (and only 12) credit hours of dissertation (SPA 799).
- Thirty hours of credit for the M.A. in Spanish will count toward the 84 credit hours.
- A written and oral comprehensive examination, designed to ascertain the candidate's knowledge and orientation in the field of study and competency to proceed with the dissertation, is required at or near the end of course work.

Admission Requirements: All candidates for the Ph.D. in Spanish must submit the Graduate College online application and fulfill the general requirements of the Graduate College concerning admission.
Candidates for the doctorate in Spanish will be required to demonstrate a near-native oral proficiency in Spanish and to show that they have developed a high order of expository prose in English and Spanish by presenting a term paper or a chapter of the M.A. thesis.
The Spanish graduate program requires a 3.75 overall GPA (on a 4.00 scale).
Admission to the Spanish doctoral program requires the candidate to present an M.A. in Spanish or equivalent from an accredited institution.
The committee may request letters of recommendation regarding the applicant's command of Spanish and potential for doctoral work. A personal interview may also be appropriate.
It is recommended, but not required, that students applying for admission to the M.A. or Ph.D. program submit scores on the GRE; this is especially advisable for the applicants for Spanish Graduate Fellowship Award.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.clas.asu.edu/graduate/degrees/phd-spanish
LL 440
silc@asu.edu
480-965-6281

## Speech and Hearing Science, PHD (LAHEARPHD)

Online Degree Search Title: Speech and Hearing Science (PhD)
Campus: TEMPE
Program Description: The Ph.D. in speech and hearing science is designed to prepare scholars for careers of basic and applied research in educational, industrial or healthcare delivery environments. The student pursues a program with the unifying theme of human communication and its disorders.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation After a core curriculum, which may include aspects of neuroscience, methodology or speech and hearing science, the student completes a program of study under the guidance of the program committee. As part of the Ph.D. program, a programmatic research experience prepares the student for basic or applied research leading to the dissertation.

Admission Requirements: Applicants typically have completed a master's degree or equivalent in speech and hearing science, psychology, linguistics or a related discipline. Applicants with a bachelor's degree, strong research interests and a strong academic record are also considered.
Applicants must submit the following evidence for admission review:

- GRE scores, including the writing score, taken within the last five years.
- Online application for admission to the Graduate College and official transcripts of undergraduate and graduate study.
- Professional references from three individuals who are familiar with the applicant's academic record.


## Contact Information:

Liberal Arts and Sciences, College of
Department of Speech and Hearing Science
http://shs.asu.edu/
COOR 2211
shsgrad@asu.edu
480-965-2374

## Statistics, MS (GCSTATMS)

Online Degree Search Title: Statistics (MS) Campus: TEMPE

Program Description: The Committee on Statistics offers a program leading to the degree M.S. in statistics. The program is interdisciplinary in that it draws upon faculty research and teaching interests from various academic units so that programs of study can be tailored to reflect individual needs and goals. The committee, which sets program requirements and supervises programs of study, is composed of faculty from departments in the Ira A. Fulton Schools of Engineering, the College of Liberal Arts and Sciences, the W. P. Carey School of Business and the New College of Interdisciplinary Arts and Sciences.
The program for the M.S. in statistics provides preparation for either a research-oriented or a practice-oriented career.
Requirements specific to this program ensure balanced attention to the theoretical and applied aspects of the discipline of statistics. The program prepares students for careers in business, education, industry and government. Graduates understand the theory that is fundamental to the proper use of statistics, are knowledgeable about the tools of applied statistics and are familiar with computer software packages available for doing statistical computations. In addition, students interested in research in statistics can obtain the background needed to begin a doctoral program. Flexibility in the program reflects the fact that statistical analysis is one of the most widely used tools of modern scientific reasoning.

Degree Requirements: 30 credit hours a Thesis and an Oral Comprehensive Exam or 30 credit hours an Applied Project and an Oral Comprehensive Exam
Completion of the degree requires 30 credit hours of approved credit, none of which may be from the prerequisites. The program must include the nine credit hours from three required theory courses:
STP 501 Probability
STP 502 Mathematical Statistics
STP 526 Theory of Statistical Linear Models
The required theory courses are fundamental to the education of statisticians and are necessary for more advanced graduate study. Two courses in applied linear statistical models are also required:

- Applied regression analysis (IEE 578, ECN 525 or STP 530).
- Applied analysis of variance/design of experiments (IEE 572, ECN 530 or STP 531).

The program must also include either three credit hours of applied project (IEE 593, ECN 593 or STP 593) or six credit hours of thesis (IEE 599, ECN 599 or STP 599). The applied project or thesis must be defended at an oral examination. The content of the applied project report or thesis must, in its final form, be suitable for submission to an academic journal or conference proceedings. The thesis must conform to Graduate College format requirements.
The remaining nine or 12 credit hours come from elective courses chosen by the student with the approval of supervising faculty. A maximum of six credit hours may be chosen from a related field on which statistics relies (such as computer science) or in which statistics is an essential tool (e.g., biostatistics, quality control). The elective courses allow the student to emphasize a particular area of statistical inference, culminating in an applied project report or a thesis on a topic in that area. No foreign language or written comprehensive examinations are required.
The student has considerable flexibility in selecting an area of specialty. Possible areas of specialty include, among others:

- Applied data analysis.
- Bayesian analysis.
- Biostatistics.
- Categorical data analysis.
- Data mining.
- Design of experiments.
- Industrial statistics.
- Linear models.
- Multivariate analysis.
- Sampling and survey research.
- Six sigma methodology.
- Smoothing methods.
- Statistical computing.
- Statistical process control.
- Time series analysis.

Admission Requirements: Applicants must submit the Graduate College online application and satisfy the general requirements for admission to the Graduate College. Applicants should have completed the following courses (equivalents at ASU are given in parentheses):

- Advanced calculus (MAT 371).
- Calculus (MAT 270, 271 and 272).
- Computer programming (CSE 100).
- Introductory applied statistics (QBA 221 or STP 420).
- Linear algebra (MAT 342).

Applicants who lack any of these prerequisite courses must complete the prerequisites before being considered for admission. The submission of GRE scores is strongly encouraged, but not required. In addition, applicants must submit three letters of academic recommendation and a brief statement of purpose to the director of the committee on statistics. Although most applicants earn the bachelor's degree in a quantitative area (such as statistics, quantitative business analysis, mathematics, engineering or computer science), this is not required for admission to the program.

## Contact Information:

Liberal Arts and Sciences, College of
School of Mathematical and Statistical Sciences
http://graduate.asu.edu/statistics
PSA 743
statistics@asu.edu
480-965-2671

## Statistics, PHD (LASTPPHD)

Online Degree Search Title: Statistics (PHD)
Campus: TEMPE
Program Description: Statistics has been described as the science of learning from data. Statisticians are involved with both the collection and subsequent analysis and interpretation of data.
The Ph.D. program in statistics will train statisticians for positions locally and nationally in business, industry, government and academia. Graduates of the program will be able to not only use advanced statistical methods but also to develop new methods to meet the fast growing need for analysis of data arising in many areas.
The statistics Ph.D. program includes faculty from departments in the Ira A. Fulton Schools of Engineering, the College of Liberal Arts and Sciences, the W. P. Carey School of Business and the New College of Interdisciplinary Arts and Sciences. The interdisciplinary collaboration provides the opportunity for programs of study to be tailored to reflect individual needs and goals.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation This program includes:

- Fifteen credit hours of core course work (mathematical statistics, probability, STP 526, STP 527, STP 530 or IEE 578, STP 531 or IEE 572).
- Forty-five credit hours of elective statistics or related area courses approved by the student's supervisory committee.
- Twelve credit hours of research (792).
- Twelve credit hours of dissertation (799).

Students must pass:

- A dissertation prospectus examination.
- One qualifier examination and course work in analysis. See the school Website for examination information.
- A written comprehensive examination.

Each student must write a dissertation and defend it orally in front of five dissertation committee members. See the department website for examination information.

Admission Requirements: Applicants must submit:

- The general GRE scores.
- The Graduate College online application.
- Official transcripts.
- A statement of education and career goals.
- Three letters of recommendation.

Minimum background for consideration of admission to the Ph.D. program in statistics includes:

- A bachelor's degree in statistics, mathematics or a closely related area with a 3.00 GPA ( 4.00 scale).
- Applicants should have completed the following courses (equivalents at ASU are given in parentheses): calculus (MAT 270, 271 and 272), advanced calculus (MAT 371), linear algebra (MAT 342), computer programming (CSE 100), and introductory applied statistics (QBA 221 or STP 420).
- Applicants who lack any of these prerequisite courses must complete the prerequisites before being considered for admission.


## Contact Information:

Liberal Arts and Sciences, College of
School of Mathematical and Statistical Sciences
http://math.asu.edu/graduate
PSA 216
grad@math.la.asu.edu
480-965-3951

## Teaching English as a Second Language, MTE Speake (LAENGMTESL)

Online Degree Search Title: Teaching English to Speakers of Other Languages (MTESOL)
Campus: TEMPE
Program Description: The faculty in the Department of English offer a professional program leading to the Master of Teaching English to Speakers of Other Languages (MTESOL). This specialized degree program provides students with the knowledge and the skills necessary to teach English as a second language. The focus of the program is on theories and methods of language teaching and the aspects of linguistics that teachers need for effective classroom performance.

Degree Requirements: 30 credit hours an Applied Project and a Foreign Language Exam
Approved graduate course work must include:

- An internship is recommended if a student has no teaching experience.
- LIN 500 Research Methods. LIN 510 Linguistics.
- LIN 520 Second-Language Acquisition Theories.
- LIN 521 Methods of Teaching English to Speakers of Other Languages.
- A three-hour Applied Project (LIN 593).

Foreign Language Requirement: A foreign language is required and must be completed during the program.
Applied Project: A three-hour Applied Project (LIN 593), which is overseen by a director, chosen from the English department linguistics/TESOL faculty.

Admission Requirements: Applicants for the MTESOL may have undergraduate majors in fields such as, but not limited to:

- Anthropology.
- Applied linguistics.
- Cognitive science. Communication.
- Comparative languages and literatures.
- Education.
- English literature.
- History.
- Law.

The Graduate College requires a grade point average of "B" (3.00) or better in the last two years of work leading to the bachelor's degree, and the recommendation of the department or the academic unit in which the student plans to study. International students must submit a TOEFL score of at least 250 computer-based, 100 Internet-based, or an IELTS score of 6.5 or above before admission is considered.
Applicants apply online. The deadlines are January 15 and April 15 for fall admission and September 15 for spring admission. The following supporting documents are required and can be uploaded during the online application process:

- Official transcripts.
- Statement of purpose.
- Three letters of recommendation.
- TOEFL scores.


## Contact Information:

Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/gradstudies-mtesol
LL 543B
enggrad@asu.edu
480-965-3194

## Transborder Studies, MAS (LATCLMAS)

Online Degree Search Title: Transborder Studies (MAS)
Campus: TEMPE

Program Description: The Master of Advanced Study in transborder studies is designed for the post-baccalaureate professional who seeks training in an integrated program that also provides for differentiation to a limited extent via three thematic options. The course of study is designed to provide a cohesive and holistic program of learning that focuses on the complex economic, political, ecological, social and cultural issues of a co-evolving border region of the U.S. Southwest and Mexico. Students will be required to engage in an intensive internship process in which they will apply their learning. The program will also provide a choice to explore one of the following three areas more deeply:

- Transborder Migration, Health and Applied Social Policy, which provides students with theoretical and applied frameworks for understanding border communities in the areas of migration, health, education, environment and other areas affecting social development
- Transborder Media and Expressive Culture, which provides students with an interdisciplinary understanding of how representation, interpretation and language shape, and are shaped by, Chicana/o, Mexican and Latina/o culture in a transborder context
- Transborder Culture, Language and Learning, which focuses on the interrelated processes of cultural emergence, language development and learning as they interact with each other in conjunction with the development of mathematical and scientific reasoning skills, literacy skills and critical thinking in the transborder context.

Degree Requirements: 30 credit hours including the required course (TCL 608) a Written Comprehensive Exam an Oral
Comprehensive Exam and a Foreign Language Exam

- Required core courses (12).


## Admission Requirements:

- Applicants must submit an online Graduate College application.
- Minimum of a bachelor's degree (or equivalent) or a graduate degree from a regionally accredited college or university. Bachelor's degree must be in the social sciences, humanities, sciences, health, education, business or professional field.
- Minimum of a 3.00 cumulative GPA $(4.00=A)$ in the last 60 hours of a student's bachelor's degree program.
- GRE required.
- TOEFL required for applicants from a country whose native language is not English, see
http://graduate.asu.edu/admissions/international/english_proficiency.


## Contact Information:

Liberal Arts and Sciences, College of
School of Transborder Studies
http://sts.asu.edu/
COOR 6653
tcls.info@asu.edu
480-965-4908

## Transportation Systems (certificate), CERT (GCTRANSCE) <br> Online Degree Search Title: Transportation Systems (Grad Certificate) <br> Campus: TEMPE

Program Description: Transportation has emerged as one of the highest priority issues for policy makers, employers and citizens. The transportation systems certificate program enhances the education of current and future transportation professionals to respond to this challenging environment. It builds upon existing programs in five disciplines, offered in five colleges and two campuses in the ASU system. The program approaches the subject from an integrated systems perspective. It exposes students to a
range of transportation alternatives and the interrelationships among transportation, economic development, land use, energy and the environment.
The certificate program offers current ASU graduate students and transportation professionals the opportunity to pursue a wide range of transportation-related issues from a multimodal and interdisciplinary perspective. The certificate is intended to be either a specialization within an existing master's degree or a stand-alone, 15-credit-hour, nondegree program.

Degree Requirements: 15 Credit hours including a Capstone (PUP 531)
This graduate certificate requires: a proseminar class (three hours), three elective courses from an approved list of transportationrelated courses (including at least one from a field outside the student's major) and a capstone research paper that explores a transportation problem from a multidisciplinary perspective (three hours). Students are strongly encouraged to include, as one of the three elective courses, a course in methods or techniques applicable to transportation systems planning. In developing a capstone paper, students are encouraged to work with transportation professionals in their area of interest to identify a topic that is of interest to the broader public.
All decisions related to program offerings and departmental participation are made in cooperation with the transportation systems certificate admissions and advisory committee, which includes a member from each participating department.

Admission Requirements: Admission to the transportation certificate program is the same for both new students and current degree-seeking students.
Application requirements are as follows.
Applicants must:

- Complete the online application through the Graduate College.
- Submit responses to two essay questions:
- What do you expect to gain from the transportation certificate?
- What types of courses within the certificate would be the most helpful in meeting your objective?
- Provide official transcripts.
- Provide a current resume.
- Provide official Test of English as a Foreign Language (TOEFL) scores for international students. Information regarding English proficiency requirements can be found on the Graduate College Website.

Questions regarding transcript requirements need to be directed to the Graduate College.
Applicants who wish to seek a graduate degree in any of the cooperating departments and who are not currently enrolled in ASU must complete the full graduate school application process as specified by the department of interest, in addition to an online application for the transportation certificate. Please see department guidelines for admission to a degree program. Please be aware that admission to a degree program and the transportation certificate program are independent of each other. Applicants interested in applying for the transportation certifcate in addition to a degree program must also complete an admission essay for the certificate program that is independent from an admission essay for a degree program.
Admission to the program will be determined by the transportation systems certificate admissions and advisory committee, consisting of representatives from each of the participating programs.
For U.S. Department of Education Gainful Employment Program Disclosure information, see
http://catalog.asu.edu/files/shared/GE_Disclosure_GCTRANSCE.pdf.

## Contact Information:

Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/certificates
COOR 5673
geoplan@asu.edu
480-965-7533

## Urban and Environmental Planning, MU/EP (ARURBMUEP)

Online Degree Search Title: Urban \& Environmental Planning (MUEP)
Campus: TEMPE
Program Description: The M.U.E.P. is an interdisciplinary professional degree designed to prepare students for leadership roles in planning, in both the public and private sectors, within organizations ranging in scope from local to international. The M.U.E.P. is
accredited by the Planning Accreditation Board. The curriculum includes a common core of required courses that provides linkage between knowledge and practice, and fundamental theories and skills.
The four specializations offered are community and urban development, environmental planning, international planning and transportation planning.
The community and urban development specialization provides students with knowledge and skills in areas such as housing, economic and community development, public policy analysis, transportation, land use planning, urban design and historic preservation.
The environmental planning specialization provides students with knowledge and skills in such areas as:

- Conservation.
- Environmental policy analysis.
- Environmental resources.
- Growth management.
- Open space design.
- Sustainable design.

The international planning specialization prepares planners to work in the diverse and changing urban fabric of developing nations and in U.S. cities, with their growing multinational and multicultural populations.
The transportation planning specialization focuses on nonmotorized transportation, economic development, border issues and the environment.
Specializations provide connections between the School of Planning and the other disciplines in the university. Students have a unique opportunity to integrate urban and environmental aspects of planning in rapidly developing metropolitan areas in the demographic and climatic context of the southwest region of the United States.

Degree Requirements: 47 credit hours and a Thesis or 47 credit hours and an Applied Project or 47 credit hours including a Capstone Course (PUP 580)
The plan has the typical distribution as follows:

- Required core courses, including either the capstone studio, thesis or professional project (26).
- Specialization courses (12).
- Electives (9).

Students must complete the required core courses and select an area of specialization. Students must also select a capstone studio, a professional project or a thesis option. Successful completion of an approved statistics course, if not achieved by the student as an undergraduate, will be required as a deficiency.

Admission Requirements: To be considered for the program, the applicant must submit the Graduate College online application and fulfill all admission requirements of the Graduate College, in addition to meeting admission requirements of the School of Planning. The following materials are required by the School of Planning:

- An application to the Graduate College.
- Official transcripts from all other colleges and universities attended.
- A statement of intent (maximum 600 words) explaining:
- The applicant's interest in planning.
- The applicant's academic and professional background and, if appropriate, preparation for the selected area of specialty (this may include written samples or a portfolio, but they are not required).
- The applicant's educational objectives.
- Test of English as a Foreign Language (TOEFL) scores from international students whose native language is not English.
- Three letters of recommendation from references who are qualified to comment on the applicant's potential in the selected area of study.
- A current resume.


## Contact Information:

Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/muep
COOR 5673
geoplan@asu.edu
480-965-7533

## New College of Interdisciplinary Arts and Sciences <br> Communication Studies, MA (ASCOMSTMA)

Online Degree Search Title: Communication Studies (MA)
Campus: WEST

Program Description: The M.A. in communication studies prepares students for communication-intensive roles in such fields as:

- Community relations.
- Employee communication.
- Grass-roots advocacy.
- Health communication.
- Media campaigns.
- Political communication.
- Public affairs.
- Technology-mediated communication systems.

A substantive number of graduates pursue the Ph.D. and careers in teaching and research.
Within the M.A. in communication studies, the notion of advocacy is explored. This is achieved by examining advocacy across the discipline's traditional classifications and within a variety of contexts. This approach allows faculty to journey with students to discover and attend to advocacy in new and unique ways, to collectively theorize and practice advocacy. People who come to our program join the faculty in this endeavor.
Advocacy occurs at the intersection of public and private lives, in the space where the two overlap and mutually inform one another, often in complex and challenging ways. It is here that we seek to uncover the ways in which symbols, messages and meaning are constructed and arranged to establish, facilitate, enhance or detract from the social status, social support and/or social identity of particular and often marginalized groups. Although the faculty recognize fully that one can advocate on one's own behalf, the faculty believe that the true work of advocacy involves attending to the other. Advocacy, though, is not limited simply to speaking directly on another's behalf. Rather, advocacy involves working diligently and ethically to create a space, whether it is public or private, in which the other can speak for himself or herself. The advocate uses communication theory and practice to reclaim space for and to provide voice to the other. Advocacy is a calling to the responsibility we have for others in the global age. The M.A. in communication studies seeks to provide those interested in advocacy the opportunity to develop the intellectual and conceptual skills necessary to follow that calling.

Degree Requirements: 36 credit hours and a Thesis or 36 credit hours and a Written Comprehensive Exam or 36 credit hours and an Applied Project
The degree consists of these courses:
CMN 502 Theory and Practice in Communication and Persuasion (3) or CMN 522 Argumentation and Advocacy (3)
CMN 505 Methods in Applied Communication Research (3)
CMN 506 Humanistic Inquiry and Field Research in Communication (3)
Electives* (21)
Thesis or applied project (6) or written comprehensive examination plus six credit hours of course work (6)

* At least 21 credit hours of electives are selected in consultation with the student's program advisor. When appropriate, students may take up to six credit hours outside the program.
Additional Requirements
CMN 502 or 522,505 , and 506 must be completed with a grade of "B" (3.00) or higher. In addition, the student must earn a cumulative GPA of 3.00 or higher in all courses numbered 500 or above that appear on the transcript and all courses that appear on the program of study.
The determination of requirements for each student's program of study is the mutual responsibility of the student and his or her advisor. Students are permitted to take comprehensive examinations only concurrent with, or subsequent to, completion of their 36th credit hour of course work. Students who choose to complete the thesis or applied project option are permitted to register for thesis or applied project credit hours only concurrent with, or subsequent to, completion of their 24th credit hour of course work. Thesis or Applied Project
The thesis or applied project must demonstrate intellectual, academic, and/or professional growth and ability. The thesis or applied project are supervised and approved by the student's advisor and committee. An oral defense is required for the thesis or applied project.
Descriptions of current program options and requirements are available from the Communication Studies Program in FAB N301G.

Admission Requirements: Admission to the program is competitive, based on an applicant's undergraduate scholarly activities, research abilities and professional experience. All applicants must submit the following:

- A completed Graduate College application and official transcripts of all undergraduate and graduate work.
- A 500-word personal statement indicating academic and professional goals and addressing how the program will aid in the achievement of those goals.
- Three letters of recommendation, up to two of which may come from appropriate professional, non-academic sources.
- A writing sample of scholarly work or an example of professional activities (i.e., technical reports, grants, creative campaign).
- If the undergraduate cumulative GPA is below 3.00 for the last 60 credit hours, official GRE scores are required.

Students whose native language is not English must also achieve a minimum test score of 550 paper-based, 213 computer-based or 83 Internet-based on the Test of English as a Foreign Language (TOEFL) or a minimum overall score of 6.5 on the International English Language Testing System (IELTS).

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/graduate/degrees/comm_studies_ma
FABN301G
janis.lacey@asu.edu
602-543-6266

## Interdisciplinary Studies, MA (ASINTERMA)

Online Degree Search Title: Interdisciplinary Studies (MA)
Campus: WEST

Program Description: The M.A. in Interdisciplinary Studies is an innovative and flexible degree program designed for students who wish to pursue a unique educational experience by combining the study of two or more disciplines. Founded on the conviction that solving problems and producing knowledge in the 21st century often requires the crossing of disciplinary boundaries, the program provides exposure to a variety of research methods, historical perspectives, and modes of inquiry.
Prospective students include teachers who intend to increase and integrate their knowledge in specific content areas, professionals in the corporate and nonprofit sectors who wish to advance or redirect their careers, aspiring scholars and researchers who want to prepare for doctoral study, and other individuals who desire personal enrichment in the humanities and social sciences. Once admitted to the program, students may define their own area of emphasis or adopt an area such as:

- American studies.
- Assessment of integrative health modalities.
- Cultural studies.
- Digital media art.
- English literature.
- Nonprofit leadership and management.
- Philosophy, rhetoric and literature.
- Women's studies.

The degree requires 30 credit hours of course work, including three core courses that prepare students for advanced interdisciplinary study. Working closely with a faculty advisor, students may select the remaining courses from graduate offerings across the New College of Interdisciplinary Arts and Sciences, and across other Arizona State University colleges and schools. The program culminates with a capstone experience that may result in either a research paper or applied project.

Degree Requirements: 30 credit hours including a Capstone Course (MAS 585)
Core Required Courses ( 9 credit hours)
MAS 501 Methods for Interdisciplinary Inquiry
MAS 502 Perspectives in Interdisciplinary Studies
MAS 505 Theories of Change, Culture, and Mind
Area of Emphasis/Focus Area (15-18 credit hours)
Working with a faculty mentor, students select 15 to 18 credit hours of graduate-level course work that reflects a particular area of specialty or interest.
Elective (0-3 credit hours)
Students can select three credit hours of a graduate level elective in order to reach the required 30 credit hours for the degree program.
Capstone Experience (3 credit hours)
MAS 585 Capstone Course (3)

Admission Requirements: Admission is granted on a competitive basis. To be admitted to the M.A. in Interdisciplinary Studies, candidates must have a four-year bachelor's degree from a regionally accredited institution or foreign equivalent, and must submit the following:

- A completed Graduate College application.
- Official transcripts of all undergraduate and graduate course work.
- Official GRE scores if undergraduate GPA is below 3.0.
- A personal statement.
- Three letters of recommendation. It is preferred that these letters come from faculty.
- Writing sample.
- Resume.

Students whose native language is not English must also achieve a minimum test score of 550 paper-based, 213 computer-based or 83 Internet-based on the Test of English as a Foreign Language (TOEFL), or a minimum overall score of 6.5 on the International English Language Testing System (IELTS).

## Deadlines

Fall Semester
Priority: Feb. 15
Final: July 15
Spring Semester
Priority: Oct. 1
Final: Dec. 15

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/graduate/degrees/mais
FAB N 201
newcollegegrad@asu.edu
602-543-4444

## Psychology, MS (ASPGSMS)

Online Degree Search Title: Psychology (MS)
Campus: WEST
Program Description: The Master of Science (M.S.) in psychology program is a full-time, two-year, research-oriented program most appropriate for students who plan to continue on to a doctoral program or pursue research-related careers in business, government, or non-profit sectors. Students receive intensive training in advanced research methodology and statistical analysis, and are offered a wide variety of elective graduate seminar courses including:

- Abnormal psychology.
- Affective science.
- Behavior analysis.
- Cognitive psychology.
- Developmental psychology.
- Health psychology.
- Legal psychology.
- Psychophysiology.
- Social psychology.

Our students receive hands-on experience with:

- Data collection and analysis.
- Experimental design.
- Grant proposal writing.
- Laboratory instrumentation.
- Manuscript development.

We expect that all students will participate in faculty-guided research, including the opportunity to present research at regional and national conferences, and participate as coauthors in conferences, published research reports or monographs. In addition, students will conclude their studies with either an empirical thesis project or an applied research-based capstone project.

Degree Requirements: 31 credit hours and a Thesis or 31 credit hours and an Applied Project
Specific credit-hour requirements include:

- Training in advanced research methods and statistics (6).
- Five elective content courses in which students acquire an understanding of current theoretical issues of psychology (e.g., abnormal psychology, affective science, behavior analysis, cognitive psychology, developmental psychology, health psychology, legal psychology, psychophysiology and social psychology) where the student will become familiar with theoretical analysis and the current state of the field (15).
- A seminar for all newly admitted students, that will address professional issues such as locating and applying for external funding, ethical issues in research and practice, and participation in professional organizations. All psychology faculty present their research and participate in the seminar (1).
- Independent research hours accrued in faculty laboratories or applied projects where students will receive hands-on experience in experimental design, laboratory instrumentation, data collection and analysis and manuscript development. Students take three or more credit hours. Research credit hours cannot substitute for elective content courses.
- Completion during the second year of the program of either a thesis or an applied research project. This work will be approved and overseen by the three-member supervisory committee, as stipulated by Graduate College policy (6).

Admission Requirements: Applicants must meet Graduate College Admission requirements and submit the Graduate College online application. All applications must include the following:

- Bachelor's degree in Psychology or a related field.
- Minimum cumulative grade point average (GPA) of 3.00 on a 4.00 scale.
- Completion of the GRE, with a recommended verbal plus quantitative score of 1,100 or the equivalent in the forthcoming revision of the GRE scoring system.
- Successful completion of undergraduate psychology statistics and research methods courses (or their equivalent).
- Three letters of recommendation from faculty. Letters from faculty are preferred (but if not available, then from individuals in supervisory or professional roles).

A personal statement no longer than three, double-spaced pages must be submitted describing how you would be a good fit for our program, including your research interests and career plans. Your statement should rank-order three faculty members with whom you would be interested in working.
Students whose native language is not English must also achieve a minimum test score of 550 paper-based, 213 computer-based or 83 Internet-based on the Test of English as a Foreign Language (TOEFL) or a minimum overall score of 6.5 on the International English Language Testing System (IELTS).

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
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## Social Justice and Human Rights, MA (ASJHRMA)

Online Degree Search Title: Social Justice and Human Rights (MA)
Campus: WEST
Program Description: The M.A. in Social Justice and Human Rights offers justice and human rights approaches to specific issues such as:

- Child and family issues.
- Education.
- The environment.
- Health.
- Migration.
- Work.

These issues are approached in a context influenced by the intersection of gender, race, ethnicity, sexuality, location and/or nationality. The program provides a theoretically and methodologically rigorous program that will offer opportunities for skill specialization in research and/or in the management of advocacy-oriented organizations in the nongovernmental sector, both domestically and transnationally. Students choose one of two tracks, 1) social justice and human rights research, or 2) nongovernmental organization (NGO) management.
The program is structured so that current practitioners in NGOs and other nontraditional students are able to complete their degree requirements by spending two semesters on-campus and completing the remainder of their degree requirements back at their place of work in whatever location or country that may be. The remaining course work can be completed via a summer internship and a semester off-campus to complete the capstone experience in the field. Many students will remain on campus for their entire program of study.

Degree Requirements: 33 credit hours and a Thesis or 33 credit hours and an Applied Project
The program includes:

- Eighteen credit hours of core course work.
- Six credit hours of career-oriented track course work.
- Six credit hours of elective course work AND three credit hours of applied project.

OR

- Three credit hours of elective course work AND six credit hours of thesis.

Core Course work (18 credit hours)
JHR 500 Research Methods
JHR 501 Proseminar in Social Justice and Human Rights
JHR 506 Grant Writing for Social Justice and Human Rights
JHR 510 Problem-Based Seminar in Social Justice and Human Rights
JHR 511 Community-Embedded Seminar in Social Justice and Human Rights
JHR 584 Internship
Career-oriented Track (6 credit hours)
In consultation with the program director, each student will select either two management courses or two research courses.
Electives (3-6 credit hours)
In consultation with the program director, each student is required to complete one to two additional courses that fit their program.
Culminating Experience ( $3-6$ credit hours)
Students will complete either JHR 593: Applied Project (3 credit hours) or JHR 599: Thesis ( 6 credit hours)
Admission Requirements: Admission is granted on a competitive basis. To be admitted to the M.A. in Social Justice and Human Rights program, candidates must have a four-year bachelor's degree from a regionally accredited institution, or foreign equivalent, and must submit the following:

- A completed Graduate College application.
- Official transcripts of all undergraduate and graduate course work.
- Official GRE scores.
- Writing sample.
- A personal statement.
- Two letters of recommendation.
- Resume.

Students whose native language is not English must also achieve a minimum test score of 550 paper-based, 213 computer-based or 83 Internet-based on the Test of English as a Foreign Language (TOEFL), or a minimum overall score of 6.5 on the International English Language Testing System (IELTS).
Completion of an undergraduate research methods or statistics course is recommended but not required.
The GRE requirement may be waived if the applicant has successfully completed graduate level course work.
Deadlines
Fall Semester
Priority: Feb. 15
Final: July 15

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of Division of Social and Behavioral Sciences
http://newcollege.asu.edu/programs/social_justice/
FAB N201
NewCollegeGrad@asu.edu
602-543-4444

## Nursing and Health Innovation, College of

## Advanced Nursing Practice, DNP (NUANPDNP)

Online Degree Search Title: Advanced Nursing Practice - DNP Campus: DTPHX

Program Description: The Doctor of Nursing Practice (D.N.P.) program is designed for master's prepared, advanced practice nurses. Courses are designed for clinical experts and are innovative, interesting and organized to provide you with expert colleagues and mentors across the U.S. who can challenge you to take your practice to a new level.

Degree Requirements: 84 credit hours and an Applied Project
Post-master's entry applicants should have an idea for a project developed before entry and will complete 540 hours of clinical practice residency hours and the D.N.P. courses. The culminating document needed for completion of the D.N.P. is an evidencebased mentored applied project. Each project will be developed individually with each student. Each student will have a primary mentor working with them on the project. Clinical practice residency hours will be used to complete the project in a practice setting; work settings may be included, but specific objectives will be developed individually with each student, that may be different from the student's job. Focused clinical experiences are arranged with appropriate preceptors and administrators. Every attempt will be made to arrange this in the student's geographical area. In the event that clinical sites are unavailable in that area or if the faculty determine that the student needs additional faculty supervision of skills, the student will be required to complete their clinical experience in the Phoenix area. Rural health and experiences with disadvantaged and multi-cultural populations are encouraged, and sites are available for these experiences.

Admission Requirements: Applicants must submit the Graduate College online application. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

- An undergraduate junior or senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=A)$ or higher for any bachelor's or graduate degree attained.
- Completion of a master of science in nursing degree from institution accredited by a nationally recognized and regionally accredited agency.
- A current unencumbered license in the state where clinical practice will be conducted and/or an unencumbered Arizona license to practice as a registered nurse, and current certification as an advanced practice nurse.
- Three letters of recommendation from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation submitted by the applicant.
- An interview with a representative of the specialty area.
- Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.


## Contact Information:

Nursing \& Health Innovation, College of
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http://nursingandhealth.asu.edu
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gponursing@asu.edu
602-496-0857

## Advanced Nursing Practice (Geriatric Nurse Practitioner), DNP (NUGNPDNP)

Online Degree Search Title: Advanced Nursing Practice (Geriatric Nurse Practitioner) - DNP
Campus: DTPHX
Program Description: The program is designed for nurses seeking to become an advanced practice nurse as a geriatric nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced
pathophysiology, advanced health assessment, pharmacology and advanced practice nursing roles provide a foundation for this specialty. The Doctor of Nursing Practice program is designed to be accessible to students living or working at a distance, with course work delivered in a hybrid online format, in which students attend on-campus sessions two to three times each semester. A major focus of this program is acquisition of advanced knowledge and skills for primary care, case management, screening and health promotion of older adults in a variety of settings, including private practice, ambulatory clinics, acute care, long-term care facilities and the patient's home. Focused clinical experiences are arranged with appropriate preceptors and administrators. Every attempt will be made to arrange this in the student's geographical area. In the event that clinical sites are unavailable in that area or if the faculty determine that the student needs additional faculty supervision of skills, the student will be required to complete their clinical experience in the Phoenix area. Rural health and experiences with disadvantaged and multi-cultural populations are encouraged, and sites are available for these experiences.

Degree Requirements: 84 credit hours and an Applied Project
The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a DNP.This program includes 1170 practicum hours, exceeding the ANCC requirement.

Admission Requirements: Applicants must submit the Graduate College online application. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

- An undergraduate junior or senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=A)$ or higher for any bachelor's or graduate degree attained.
- Completion of a bachelor's degree in nursing from institution accredited by a nationally recognized and regionally accredited agency.
- A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
- Satisfactory completion of only the analytical writing section of the GRE.
- Three letters of recommendation from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation submitted by the applicant.
- An interview with a representative of the specialty area.
- Completion of the English language proficiency test per graduate college requirements and of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.


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## Advanced Nursing Practice (Adult Nurse Practitioner), DNP (NUANPADDNP) <br> Online Degree Search Title: Adult Nurse Practitioner (DNP) <br> Campus: DTPHX

Program Description: The faculty in the College of Nursing and Health Innovation offer a graduate program leading to the Doctor of Nursing Practice (D.N.P.) with a concentration in advanced practice nursing of adults. Designed for nurses seeking to become an advanced practice nurse as an adult nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced pathophysiology, and advanced health assessment, advanced practice nursing role provide a foundation for this specialty. The D.N.P. program is designed to be accessible to students living or working at a distance, with course work delivered in a hybrid online format, in which students attend on-campus sessions 2-3 times each semester. Graduates of the D.N.P. program of the adult health concentration are prepared to provide primary care to adults who are in various states of health in a variety of settings. Health promotion and illness prevention are among the essential threads integrated throughout the program of study. Focused clinical experiences are arranged with appropriate preceptors and administrators. Every attempt will be made to arrange this in the student's geographical area. In the event that clinical sites are unavailable in that area or if the faculty determine that the student needs additional faculty supervision of skills, the student will be required to complete their clinical experience in the Phoenix area. Rural health and experiences with disadvantaged and multi-cultural populations are encouraged, and sites are available for these experiences.

Degree Requirements: 84 credit hours including the required course (DNP 707) and an Applied Project

The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a D.N.P. This program includes 1,170 practicum hours, exceeding the ANCC requirement.

Admission Requirements: All applicants must submit the Graduate College online application. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

- An undergraduate junior or senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=A)$ or higher for any bachelor's or graduate degree attained.
- Completion of a bachelor's degree in nursing from institution accredited by a nationally recognized and regionally accredited agency.
- A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
- Satisfactory completion of the analytical writing section of the GRE.
- Three letters of recommendation from individuals knowledgeable about the applicant's academic and nursing leadership potential along with one self-evaluation submitted by the applicant.
- An interview with a representative of the specialty area.
- Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.


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## Advanced Nursing Practice (Adult Psychiatric Mental Health Nurse Practitioner), DNP (NUANPPMDNP)

Online Degree Search Title: Adult Psychiatric Mental Health Nurse Practitioner (DNP)
Campus: DTPHX

Program Description: Designed for nurses seeking to become an advanced practice nurse as an adult psychiatric mental health nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced pathophysiology, and advanced health assessment, advanced practice nursing role provide a foundation for this specialty. Graduate education in psychiatric mental health nursing gives opportunities for greater autonomy in practice, diverse employment opportunities, research and teaching capabilities, and advanced assessment and intervention skills. Focused clinical experiences are arranged with appropriate preceptors and administrators. Every attempt will be made to arrange this in the student's geographical area. In the event that clinical sites are unavailable in that area or if the faculty determine that the student needs additional faculty supervision of skills, the student will be required to complete their clinical experience in the Phoenix area. Rural health and experiences with disadvantaged and multi-cultural populations are encouraged, and sites are available for these experiences. The Doctor of Nursing Practice program is designed to be accessible to students living or working at a distance, with coursework delivered in a hybrid online format, in which students attend on-campus sessions two to three times each semester.

Degree Requirements: 84 credit hours and an Applied Project
The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a DNP. This program includes 1170 practicum hours, exceeding the ANCC requirement.

Admission Requirements: All applicants must submit the Graduate College online application. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

- An undergraduate junior or senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=A)$ or higher for any bachelor's or graduate degree attained.
- Completion of a bachelor's degree in nursing from institution accredited by a nationally recognized and regionally accredited agency.
- A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
- Satisfactory completion of the analytical writing section of the GRE.
- Three professional recommendations from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation.
- An interview with a representative of the specialty area.
- Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.


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## Advanced Nursing Practice (Child/Family Psychiatric Mental Health Nurse Practitioner), DNP (NUANPCFDNP)

Online Degree Search Title: Child/Family Psychiatric Mental Health Nurse Practitioner - DNP Campus: DTPHX

Program Description: The child/family psychiatric mental health nurse practitioner program is designed for nurses seeking to become a family psychiatric mental health nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced pathophysiology, advanced health assessment and advanced practice nursing provide a foundation for this specialty. The Doctor of Nursing Practice (DNP) program is designed to be accessible to students living or working at a distance, with coursework delivered in a hybrid online format, in which students attend on-campus sessions 2-3 times each semester.
Graduate education in psychiatric mental health nursing gives opportunities for greater autonomy in practice, diverse employment opportunities, research and teaching capabilities, and advanced assessment and intervention skills. Focused clinical experiences are arranged with appropriate preceptors and administrators. Every attempt will be made to arrange this in the student's geographical area. In the event that clinical sites are unavailable in that area or if the faculty determine that the student needs additional faculty supervision of skills, the student will be required to complete their clinical experience in the Phoenix area. Rural health and experiences with disadvantaged and multi-cultural populations are encouraged, and sites are available for these experiences.

Degree Requirements: 84 credit hours and an Applied Project
The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a DNP. This program includes 1170 practicum hours, exceeding the ANCC requirement.

Admission Requirements: All applicants must submit the Graduate College online application. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

- An undergraduate junior or senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=A)$ or higher for any bachelor's or graduate degree attained.
- Completion of a bachelor's degree in nursing from institution accredited by a nationally recognized and regionally accredited agency.
- A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
- Satisfactory completion of the analytical writing section of the GRE.
- Three letters of recommendations from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation submitted by the applicant.
- An interview with a representative of the specialty area.
- Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.


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## Advanced Nursing Practice (Family Nurse Practitioner), DNP (NUANPFNDNP)

Online Degree Search Title: Family Nurse Practitioner - DNP
Campus: DTPHX

Program Description: Designed for nurses seeking to become an advanced practice nurse as a family health nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced pathophysiology and advanced health assessment, advanced practice nursing role provide a foundation for this specialty. The focus in courses is on development of expertise in providing primary care to individuals of all ages within traditional, nontraditional and culturally diverse families. Theory and practicum courses are designed to prepare the student for certification in advanced practice nursing as a family nurse practitioner. Focused clinical experiences are arranged with appropriate preceptors and administrators. Every attempt will be made to arrange this in the student's geographical area. In the event that clinical sites are unavailable in that area or if the faculty determine that the student needs additional faculty supervision of skills, the student will be required to complete their clinical experience in the Phoenix area. Rural health and experiences with disadvantaged and multi-cultural populations are encouraged, and sites are available for these experiences.

Degree Requirements: 84 credit hours and an Applied Project
The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a D.N.P. This program includes 1,170 practicum hours, exceeding the ANCC requirement.

Admission Requirements: All applicants must submit the Graduate College online application. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

- An undergraduate junior or senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=A)$ or higher for any bachelor's or graduate degree attained.
- Completion of a bachelor's degree in nursing from an institution accredited by a nationally recognized and regionally accredited agency.
- A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
- Satisfactory completion of the analytical writing section of the GRE.
- Three letters of recommendation from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation submitted by the applicant.
- An interview with a representative of the specialty area.
- Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.


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## Advanced Nursing Practice (Neonatal Nurse Practitioner), DNP (NUANPNDNP)

Online Degree Search Title: Neonatal Nurse Practitioner - DNP Campus: DTPHX

Program Description: Designed for nurses seeking to become an advanced practice nurse as a neonatal nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced pathophysiology, advanced health assessment provide a foundation for this specialty.
Advanced neonatal nursing theory and clinical courses focus on the development of a framework for developmentally supportive, family-centered, culturally appropriate, advanced nursing practice with infants, children and families. Focused clinical experiences are arranged with appropriate preceptors and administrators. Every attempt will be made to arrange this in the student's geographical area. In the event that clinical sites are unavailable in that area or if the faculty determine that the student needs additional faculty supervision of skills, the student will be required to complete their clinical experience in the Phoenix area. Rural health and experiences with disadvantaged and multi-cultural populations are encouraged, and sites are available for these experiences.

Degree Requirements: 84 credit hours and an Applied Project
The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a DNP. This program includes 1170 practicum hours, exceeding the ANCC requirement.

Admission Requirements: All applicants must submit the Graduate College online application. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

- An undergraduate junior or senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=A)$ or higher for any bachelor's or graduate degree attained.
- Completion of a bachelor's degree in nursing from institution accredited by a nationally recognized and regionally accredited agency.
- A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
- Satisfactory completion of the analytical writing section of the GRE.
- Three letters of recommendation from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation.
- An interview with a representative of the specialty area.
- Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.


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## Advanced Nursing Practice (Pediatric Nurse Practitioner), DNP (NUANPPDNP)

Online Degree Search Title: Pediatric Nurse Practitioner - DNP Campus: DTPHX

Program Description: Designed for nurses seeking to become an advanced practice nurse as a pediatric nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced pathophysiology, advanced health assessment provide a foundation for this specialty.
Advanced pediatric nursing theory and clinical courses focus on the development of a framework for developmentally supportive, family-centered, culturally appropriate, advanced nursing practice with infants, children and families. Focused clinical experiences are arranged with appropriate preceptors and administrators. Every attempt will be made to arrange this in the student's geographical area. In the event that clinical sites are unavailable in that area or if the faculty determine that the student needs additional faculty supervision of skills, the student will be required to complete their clinical experience in the Phoenix area. Rural health and experiences with disadvantaged and multi-cultural populations are encouraged, and sites are available for these experiences.

Degree Requirements: 84 credit hours and an Applied Project
The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a DNP. This program includes 1170 practicum hours, exceeding the ANCC requirement.

Admission Requirements: All applicants must submit the Graduate College online application. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

- An undergraduate junior or senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=A)$ or higher for any bachelor's or graduate degree attained.
- Completion of a bachelor's degree in nursing from an institution accredited by a nationally recognized and regionally accredited agency.
- A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
- Satisfactory completion of the analytical writing section of the GRE.
- Three letters of recommendation from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation.
- An interview with a representative of the specialty area.
- Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.


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## Adv Nursing Practice (Women's Health NP), DNP (NUANPWHDNP)

Online Degree Search Title: Women's Health Nurse Practitioner - DNP
Campus: DTPHX
Program Description: Designed for nurses seeking to become an advanced practice nurse as a women's health nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced pathophysiology, advanced health assessment and advanced practice nursing role provide a foundation for this specialty. The Doctor of Nursing Practice program is designed to be accessible to students living or working at a distance, with course work delivered in a hybrid online format, in which students attend on-campus sessions two to three times each semester.
Women's health care theory and clinical courses include theories, principles, and clinical skills in the care of women and their families. Courses focus on critical thinking, diagnosis, problem-solving, and nursing management of women throughout the maternity cycle and with common gynecological problems. Client education, communication and collaboration are emphasized.

Degree Requirements: 84 credit hours and an Applied Project
The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a DNP. This program includes 1170 practicum hours, exceeding the ANCC requirement.

Admission Requirements: All applicants must submit the Graduate College online application. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

- An undergraduate junior or senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=A)$ or higher for any bachelor's or graduate degree attained.
- Completion of a bachelor's degree in nursing from an institution accredited by a nationally recognized and regionally accredited agency.
- A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
- Satisfactory completion of the analytical writing section of the GRE.
- Three letters of recommendation from individuals knowledgeable about the applicant's academic and nursing leadership potential, along with one self-evaluation submitted by the applicant.
- An interview with a representative of the specialty area.
- Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.


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## Child and Adolescent Mental Health Intervention (certificate), CERT (NUCAMHICE)

Online Degree Search Title: Child and Adolescent Mental Health Intervention Specialist (Grad Certificate) Campus: DTPHX

Program Description: The College of Nursing and Health Innovation at ASU offers the nation's first child and adolescent mental health intervention specialist graduate certificate program. This innovative program is designed specifically for pediatric and family nurse practitioners, physicians and other interdisciplinary health care providers who desire to enhance their knowledge and skills in the assessment and management of common mental and behavioral health problems in children and adolescents. This graduate
certificate curriculum is predominantly an online distance education program with two, two-day visits to the ASU Downtown Phoenix campus for orientation and intensive learning.

Degree Requirements: 15 credit hours
Nine credit hours of this program can be transferred into the college's post-master's child/family psychiatric mental health nurse practitioner program for those students desiring more depth in assessing and treating child and adolescent mental health problems as a child/family psychiatric mental health nurse practitioner.

## Admission Requirements:

- All applicants must submit the Graduate College online application.
- Applicants must either have an M.S. in nursing and work as a pediatric/family nurse practitioner or pediatric clinical nurse specialist, or be a health-related professional (e.g., physician, social worker, physician assistant) with experience in child and adolescent behavioral and mental health.
- Current health care licensure in the applicant's state of residence is needed for admission to the certificate program.


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## Child/Family Mental Health Nurse Practitioner (certificate), CERT (NUPMNUPRCE)

Online Degree Search Title: Child/Family Mental Health Nurse Practitioner (Grad Certificate) Campus: DTPHX

Program Description: Designed for nurses seeking to become an advanced practice nurse as a child/family psychiatric mental health nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced pathophysiology and advanced health assessment provide a foundation for this specialty. Graduate education in psychiatric mental health nursing gives opportunities for greater autonomy in practice, diverse employment opportunities, research and teaching capabilities and advanced assessment and intervention skills. Focused clinical experiences are arranged with preceptors and administrators in the student's local healthcare setting. Rural health and experiences with disadvantaged and multicultural populations are encouraged.

Degree Requirements: 28 credit hours
This graduate certificate program (including 585 clinical hours) prepares nurses with a master's degree to become child/family psychiatric nurse practitioners.
Prerequisites required, or equivalent courses taken in master's degree program:
DNP 604 and 630 Human Pathophysiology (3) - across the lifespan.
DNP 608 Pharmacology (2) - across the lifespan.
DNP 605 and DNP 631 Advanced Health Assessment (3) - across the lifespan.
DNP 609 and 610 Advanced Practice Nursing Role (3).
Students will have an individual review of their transcripts and an individualized plan of study designed to meet certification requirements. Depending on how many of the prerequisite courses are completed in master's degree, up to one year of additional study may need to be added to complete this specialty.

## Admission Requirements:

- Graduate College online application.
- Master of Science in nursing from an institution accredited by a national recognized and regionally accredited university.
- Official transcripts from all universities.
- Unencumbered RN license in state where you plan to do your clinical practicum experience. Students who live out of state can complete their clinical practicums in their own state if suitable practicum sites are available and they agree to contract with the College of Nursing and Health Innovation.
- Three letters of recommenation from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation submitted by the applicant.
- An interview with a representative of the specialty area.


## Contact Information:

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## Clinical Research Management, MS (NUCRMMS)

Online Degree Search Title: Clinical Research Management, Nursing (MS)
Campus: DTPHX, ONLNE

Program Description: The M.S. in clinical research management attracts nurses and health care professionals throughout the nation and internationally for advanced education as clinical research professionals in the diversified and complex clinical research industry. Health care professionals from fields outside of nursing may complete the curriculum to obtain an M.S. in clinical research management, with completion of stated prerequisites.
The clinical research management specialty takes a transdisciplinary approach in providing an education strong in the commercial and fiscal practices of conducting clinical research, ethical and regulatory aspects of research and overall operational leadership of clinical drug, biological and medical device trials. The program is designed to be flexible and conducive to the adult learner. The clinical research management MS program is offered online with an initial two-day orientation.

Degree Requirements: 33 credit hours including a Capstone (HCR 566)
A six credit hour, capstone clinical research project is required.

Admission Requirements: Applicants must submit the Graduate College online application. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

- A bachelor's degree from a nationally recognized, regionally accredited institution
- An undergraduate junior/senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=\mathrm{A})$ or higher, for any undergraduate or graduate degree attained.
- All applicants must have completed the following undergraduate three-credit, pre-requisite courses (or equivalent) with a grade of "C" (2.00) or better:
- Anatomy and physiology.
- Health care system overview; or health policy.
- Medical terminology.


## Contact Information:

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## Clinical Research Management (certificate), CERT (NUHCRGRCC)

Online Degree Search Title: Clinical Research Management (Grad Certificate)
Campus: DTPHX

Program Description: The graduate certificate in clinical research management attracts nurses and health care professionals throughout the nation and internationally for advanced education as clinical research professionals in the diversified and complex clinical research industry. Health care professionals from fields outside of nursing may complete the curriculum to obtain a certificate in clinical research management, with completion of stated prerequisites. The clinical research management specialty takes a transdisciplinary approach in providing an education strong in the commercial and fiscal practices of clinical research, ethical and regulatory aspects of research, and overall operational leadership of clinical drug, biological and medical device trials. The program is designed to be flexible and conducive to the adult learner. The clinical research management graduate certificate is offered online with an initial two-day orientation.

Degree Requirements: 15 credit hours including a Capstone course (HCR 564)
A three credit hour capstone clinical research project is required.

Admission Requirements: Applicants must submit the Graduate College online application. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirement:

- A bachelor's degree from a nationally recognized, regionally accredited institution.
- An undergraduate junior/senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=A)$ or higher, for any undergraduate or graduate degree attained.
- All applicants must have completed the following undergraduate three-credit, pre-requisite courses (or equivalent) with a grade of " $C$ " (2.00) or better:
- Anatomy and physiology.
- Health care system overview.
- Medical terminology.
- Three references from individuals knowledgeable about the applicant's academic and leadership potential.


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## Community and Public Health Practice (certificate), CERT (NUCHPGRCH)

Online Degree Search Title: Community and Public Health Practice (Grad Certificate) Campus: DTPHX

Program Description: The graduate certificate in community and public health practice is directed toward students with bachelor's degrees who currently work in community or public health or other relevant fields and who want to solve public health problems and apply a breadth of knowledge and expertise in the community.

Degree Requirements: 16 credit hours
The graduate certificate in community and public health practice includes three credit hours ( 135 clock hours) of internship.
Admission Requirements: All applicants must submit the Graduate College online application. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

- Completion of a baccalaureate degree in nursing (or related field) from an academic institution accredited by a nationally recognized and regionally accredited agency.
- An undergraduate junior / senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=A)$ or higher for any baccalaureate or graduate degree attained.
- A current unencumbered professional license in the state where the internship will be conducted and/or an unencumbered Arizona professional practice license (if necessary).
- Three professional recommendations from individuals knowledgeable about the applicant's academic and leadership potential.
- An interview with the program faculty.
- If considered an international student, completion of the English language proficiency test per Graduate College requirements.


## Contact Information:

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## Evidence-Based Practice in Nursing and Healthcare (certificate), CERT (NUEVIDNSCE) <br> Online Degree Search Title: Evidence-Based Practice Nursing Science (Grad Certificate) <br> Campus: DTPHX

Program Description: The evidence-based practice online graduate certificate program designed to prepare nurse clinicians, educators and other healthcare professionals as experts in evidence-based practice (EBP). This 18-month program is user-friendly and constructed in a distance-learning, online format to facilitate involvement of participants throughout the U.S. and the world. Two on-site visits to ASU are required. The initial visit is an orientation and the final visit is an immersion.

Degree Requirements: 17 credit hours
Admission Requirements: Admission requirements include all Graduate College admission requirements; completion of an accredited master's degree program with a 3.00 cumulative GPA; or current enrollment in an accredited master's program with a cumulative 3.00 GPA and approval by program director.
Applicants must:

- Complete graduate online application.
- Submit a letter of support from the applicant's agency.
- Submit official transcripts from a master's program.


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## Family Nurse Practitioner (certificate), CERT (NUFMPGRCE)

Online Degree Search Title: Family Nurse Practitioner (Grad Certificate) Campus: DTPHX

Program Description: This program is designed for nurses seeking to become an advanced practice nurse as a family nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced pathophysiology and advanced health assessment provide a foundation for this specialty. The course focus is on development of expertise in providing primary care to individuals of all ages within traditional, non-traditional and culturally diverse families. Focused clinical experiences are arranged with preceptors and administrators in the student's local health care setting. Rural health and experiences with disadvantaged and multi-cultural populations are encouraged.

Degree Requirements: 22 credit hours
This graduate certificate program (including 585 clinical hours) prepares nurses with a master's degree to become family nurse practitioners.
Prerequisites required, or equivalent courses taken in master's degree program:
DNP 604 and 630 Human Pathophysiology (3) - across the lifespan.
DNP 605 and DNP 631 Advanced Health Assessment (3) - across the lifespan.
DNP 608 and 632 Pharmacology (3) - across the lifespan.
DNP 609 and 610 Advanced Practice Nursing Role (3).

Students will have an individual review of their transcripts and an individualized program of study designed to meet certification requirements. This may add up to one year of additional study to complete this certificate.

## Admission Requirements:

- An undergraduate junior or senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=A)$ or higher for any bachelor's or graduate degree attained.
- Completion of a bachelor's degree in nursing from an institution accredited by a nationally recognized and regionally accredited agency.
- A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
- Satisfactory completion of the analytical writing section of the GRE.
- Three letters of recommendations from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation submitted by the applicant.
- An interview with a representative of the specialty area.
- Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.


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## Geriatric Nursing (certificate), CERT (NUGNCERT)

## Online Degree Search Title: Geriatric Nursing (Grad Certificate)

Campus: DTPHX

Program Description: This program will prepare practice leaders who are responsive to societal and cultural needs, and who are committed to providing and improving evidence-based practice in geriatric nursing. The target groups for this certificate are nurses, nursing faculty and nurse practitioners who want to increase their knowledge related to evidence-based practice geriatric care. Nursing faculty teaching in associate degree programs and baccalaureate programs are particularly targeted so that this knowledge area can be added to basic programs of nursing in Arizona.

Degree Requirements: 15 credit hours

## Admission Requirements:

- Students must apply online to the Graduate College and meet all Graduate College admission requirements.
- Applicants must have a bachelor's degree in nursing from a regionally accredited institution in the U.S. or an equivalent degree.
- Applicants must provide a resume, goal statement and three letters of recommendation
- Interview with program faculty.


## Contact Information:

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## Healthcare Innovation, MHI (NUHCINNMHI)

Online Degree Search Title: Healthcare Innovation (MHI)
Campus: DTPHX

Program Description: The Master of Health Innovation is a 33-credit master's degree program using a hybrid online format open to nursing and non-nursing students working and living locally or at a distance. This program is an initiative led by the ASU College of Nursing and Health Innovation. The curriculum uses a hybrid online format to distinguish it from a traditional distance learning program. This unique curriculum and hybrid online format allows students to have face-to-face contact with each other and health care leaders during two- to four-day immersion sessions. These sessions take place at the beginning of each semester and at midsemester (except for the summer session). The rest of the course work is held online, using both synchronous (i.e., everyone is online in class at the same time) and asynchronous formats, voice-over lectures, discussion boards and other online learning tools.

Degree Requirements: 33 credit hours including a Capstone Course (MHI 563)

Admission Requirements: All applicants must submit the Graduate College online application. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

- A bachelor's degree from a nationally recognized and regionally accredited university.
- An undergraduate junior or senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=\mathrm{A})$ or higher for any bachelor's or graduate degree attained.
- Three professional recommendations from individuals knowledgeable about the applicant's academic and leadership potential and one self-evaluation.
- Completion of the English language proficiency test per graduate college requirements, if considered an international student.


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## International Health for Healthcare Professionals (certificate), CERT (NUHCRGRCI)

Online Degree Search Title: International Health for Healthcare Professionals (Grad Certificate)
Campus: DTPHX
Program Description: The international health for health professionals graduate certificate prepares health care personnel to meet the global health challenges of the 21st century. Students receive comprehensive education in the promotion of holistic, culturally responsive evidence-based care within and outside the U.S. Course content includes the provision of care in the presence and absence of natural (e.g., earthquakes) and human made disasters (e.g., war), the spread of chronic and infectious diseases, economic and political issues, and other factors that pose substantial challenges to world health promotion and disease prevention. This graduate certificate is offered as a part or full-time hybrid online distance program with two day visits to ASU Downtown Phoenix campus and a capstone immersion experience.

Degree Requirements: 16 credit hours including a Capstone course (HCR 572)
Admission Requirements: Applicants submit the online application to the Graduate College. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

- Undergraduate-prepared nurse or health-related professional (e.g., social worker, physician, psychologist, dentist) with a bachelor's, master's or medical degree from a nationally or internationally recognized and regionally accredited university or equivalent.
- An undergraduate junior or senior GPA equal to $3.00(4.00=A)$, or a cumulative GPA equal to 3.00 or higher for any bachelor or graduate degree attained.
- Professional license in the state where the individual Capstone project will be conducted, if required (e.g., R.N., N.P., M.S.W., P.A. or M.D.).
- Resume or curriculum vitae.
- Email addresses of three professional references who can be contacted (do not include friends or relatives).
- Fingerprint clearance or proof of application for U.S. citizens and applicants with permanent U.S. resident status.
- Photocopy of current, valid passport.
- Completion of the English language proficiency test per graduate college requirements, if considered an international student.


## Contact Information:

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## Nurse Education in Academic and Practice Settings (certificate), CERT (NUNURSEDCE) <br> Online Degree Search Title: Nurse Education in Academic and Practice Settings (Grad Certificate) Campus: DTPHX

Program Description: The graduate certificate in nurse education in academic and practice settings is an innovative program that is offered in hybrid format for nurses (or healthcare professionals) who have at least a bachelor's degree, and who are interested in teaching in academic or practice settings. This program includes courses covering curriculum development, teaching in the classroom, teaching online and producing, and evaluating educational programs in academic and practice settings.

Degree Requirements: 15 credit hours
A three credit hour teaching practicum (comprised of 135 clock hours) is required.
Admission Requirements: All applicants must submit the Graduate College online application. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

- Minimum of a bachelor's degree in nursing (or a healthcare related field) accredited by a nationally recognized and regionally accredited agency.
- An undergraduate junior or senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=A)$ or higher for any bachelor's or graduate degree attained.
- A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse (or healthcare professional) to enroll in the teaching course.
- Three letters of recommendation from individuals knowledgeable about the applicant's academic leadership potential.
- An interview with program faculty.
- Completion of the English language proficiency test per graduate college requirements and of all requirements for the Commission on Graduates of Foreign Nursing Schools (CGFNS), if considered an international student.


## Contact Information:

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## Nursing (Community Health Advanced Practice Nursing), MS (NUCHNDTMS)

Online Degree Search Title: Community Health Nursing (MS)
Campus: DTPHX
Program Description: The community health nursing graduate program provides theoretical and practical foundations for advanced practice in community/public health nursing in public or private sector health care settings. Graduate courses in nursing theory, research, epidemiology and biostatistics provide a foundation for practice in community/public health nursing. By combining public/community health theory with nursing theory and research, the community health nurse considers all influences on the population and community in decision making and outcome evaluation. The major focus in this specialty area is on utilizing public health sciences and skills in the assessment of communities and populations, policy development, program planning, effective communication and the impact of cultural influences on health. The graduate in community/public health is actively engaged in education (e.g., community, staff, students and colleagues), case management, expert clinical practice, consultation, research and administration.

Degree Requirements: 45 credit hours including the required course (NUR 593) and an Applied Project
The practicum and internship requirements include 540 clock hours. At the completion of the program, students are eligible to take the American Nurses Credentialing Center exam for national certification as an advanced public health nurse (APHN-BC).

Admission Requirements: All applicants must submit the Graduate College online application. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

- Completion of a baccalaureate degree in nursing accredited by a regional accrediting agency.
- An undergraduate junior/senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=A)$ or higher for any undergraduate or graduate degree attained.
- A current unencumbered license in the state where clinical practice will be conducted and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
- Satisfactory completion of only the analytical writing section of the GRE.
- Three letters of recommendation from individuals knowledgeable about the applicant's academic and nursing leadership potential along with one self-evaluation submitted by the applicant.
- An interview with a representative of the specialty area.
- Completion of English language proficiency per Graduate College requirements and of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.

Applications to the program are due each year by March 1 for fall semester enrollment.

## Contact Information:

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## Nursing (Nursing Education), MS (NUNURSEDMS)

Online Degree Search Title: Nursing Education (MS)
Campus: DTPHX

Program Description: The M.S. program is designed to foster scholarship, creativity and innovation that prepares the nurse educator for leadership roles in academic and practice settings. The program offers advanced-level courses that can be used to provide a seamless transition to the Ph.D. or the Doctor of Nursing Practice program depending on career goals. At the completion of the program, graduates with two years teaching experience may be eligible to take the National League for Nursing certification examination.

Degree Requirements: 38 credit hours including the required course (NUR 593) and an Applied Project
This degree program culminates in an applied project related to learner-centered education. The core of the program consists of 15 hours of courses and a practicum which focuses on the science and art of nursing education, theory and practice courses related to one of eight clinical specialties.

Admission Requirements: All applicants must submit the Graduate College online application. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

- Completion of a baccalaureate degree in nursing at an academic institution accredited by a nationally recognized and regionally accredited agency.
- An undergraduate junior or senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=A)$ or higher for any bachelor's or graduate degree attained.
- Current unencumbered license in the state where teaching practicum will be conducted and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
- Three letters of recommendations from individuals knowledgeable about the applicant's academic potential and a selfassessment form.
- Fingerprint clearance for U.S. citizens.
- Completion of the English language proficiency test per graduate college requirements, if considered an international student.


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## Nursing and Healthcare Innovation, PHD (NUNHIPHD)

Online Degree Search Title: Nursing and Healthcare Innovation (PHD) Campus: DTPHX

Program Description: The College of Nursing and Health Innovation continues to offer this program in both traditional on-site delivery format and innovative synchronous on-line delivery, designed to maintain our commitment to a highly mentored interactive learning experience. Several different modalities are also used to enhance the student's learning, including multimedia presentations, asynchronous discussion boards and live chats.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation

Up to 30 hours from a previously awarded master's degree can count toward this requirement. Twelve credit hours are required in a substantive area of concentration and may be added to any semester, based on availability and student interest.

Students are required to enroll in a minimum of nine credit hours per semester for years one and two of their program of study. Twenty-four hours are required with a research focus, including 12 hours of dissertation credit. The program of study can be as broad or as narrow as the student and the supervisory program committee deem necessary for the student's career goals. Students may choose from five substantive areas:

- Education.
- Health care innovation.
- Health outcomes in children, teens and families.
- Healthy outcomes in aging.
- World health promotion and disease prevention.

The program may incorporate courses from other disciplines to further refine substantive areas of study.
Both written and oral comprehensive examinations are required. Students must also complete and successfully defend a written dissertation.

Admission Requirements: All applicants must submit the Graduate College online application by Feb. 15. Admittance to the Ph.D. program requires a master's or bachelor's degree in nursing or a related field from an accredited program. A cumulative undergraduate GPA of at least 3.00 and a cumulative graduate GPA of at least 3.50 . Students are admitted once a year to start the fall semester.
There is an inferential statistics prerequisite for post master's applicants.
GRE scores are encouraged but not required.
International Applicants: Individuals from a country whose native language is not English must meet previous qualifications and provide evidence of English proficiency, as indicated by acceptable scores of the Test of English as a Foreign Language (TOEFL).
Acceptable TOEFL scores are 550 paper-based, 213 computer-based or 80, Internet-based.

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## Regulatory Science and Health Safety, MS (NURSHSMS)

Online Degree Search Title: Regulatory Science \& Health Safety (MS)
Campus: DTPHX

Program Description: The M.S. in regulatory science and health safety is designed to prepare students for careers in the field of regulatory affairs. The aim of the program is to instruct students about the development and commercialization of medical drugs, devices and other regulated products. The program will focus on safety, as a fundamental aspect of regulatory science, and on leadership development. The M.S. in regulatory science and health safety uses a multidisciplinary approach to meet the unique needs of regulating bodies and the regulated industry. It encompasses coursework in clinical research, ethics, quality systems, quantitative methods and statistics, leadership and project management in the regulatory field. All M.S. in regulatory science and health safety core courses are offered as classroom-based courses. Students will develop skills that incorporate an evidence-based approach to decision-making, clinical research, regulations and the evaluation of the safety of health products including drugs, medical devices and nutritional products. They will also develop leadership and project management skills.

Degree Requirements: 39 credit hours including a Capstone (HCR 560)

Admission Requirements: All applicants must submit the Graduate College online application. Admission to Graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

- A bachelor's degree from a nationally recognized, regionally accredited institution.
- An undergraduate junior/senior GPA equal to 3.00 , or a cumulative GPA equal to $3.00(4.00=\mathrm{A})$ or higher from any undergraduate or graduate degree attained.
- Three references from individuals knowledgeable about the applicant's academic and leadership potential.

Applicants who wish to be considered for the FCA/CDER Academic Collaboration Program must qualify to become an officer in the United States Public Health Service.

## Contact Information:

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## Nutrition and Health Promotion, School of Exercise and Wellness, MS (ECEXERMS)

Online Degree Search Title: Exercise and Wellness (MS) Campus: DTPHX, POLY

Program Description: This degree offers unique opportunities for those interested in becoming scholarly professionals and contributors to public health through the delivery of effective exercise and wellness programs to all segments of society. Professionals in education, counseling, commercial fitness and wellness, worksite or corporate health promotion and personal training/life coaching who are interested in an advanced training in health promotion, exercise and physical activity promotion, fitness and conditioning, or in exercise and chronic disease prevention should consider the program.

Degree Requirements: 30 credit hours and a Thesis or 30 credit hours and a Written Comprehensive Exam
All students must focus their plan of study in one of two areas: health promotion and physical activity or fitness and conditioning. The thesis is considered the final integrative experience of the degree. It involves conducting research that is guided by a recognized research paradigm (e.g., scientific, interpretive) producing a scholarly report of the process and results. The thesis option is a good choice for students who are interested in pursuing more advanced graduate study in the field. Thesis track:

- Twelve credit hours of core course work (NTR 500 Research Methods, EXW 501 Research Statistics, EXW 536 Physiology of Physical Activity and Chronic Disease, EXW 542 Health Promotion Theory).
- Twelve credit hours of elective courses in focus area.
- Six credit hours of Thesis research.

The non-thesis option is an appropriate choice for those students who cannot devote full-time to their research endeavors and/or for students who are seeking to continue their education, advance their skill level as practitioners, or advance their current careers. Non-thesis track:

- Twelve credit hours of core course work (NTR 500 Research Methods, EXW 501 Research Statistics, EXW 536 Physiology of Physical Activity and Chronic Disease, EXW 542 Health Promotion Theory).
- Eighteen credit hours of elective courses in focus area.
- Written comprehensive exam (representing core courses and focus area).

Admission Requirements: Applicants must submit the Graduate College online application.
In addition to meeting the Graduate College requirements, all applicants to program are required to submit scores from the GRE. International applicants whose native language is not English must also satisfy English proficiency requirements.
Admission to the master's degree program is based on a number of factors including: undergraduate grade point average (GPA), GRE scores, letters of recommendation and statement of career/research interests.
Applications are accepted for admission to the fall semester only, with first priority given to completed applications received by Jan. 15. Students who do not have undergraduate credit for the basic courses required for a bachelor's degree in exercise and wellness (human anatomy/physiology, human nutrition, exercise physiology, health behavior change, exercise testing and exercise prescription) can be admitted with course deficiencies. However, it is required that these deficiencies be taken prior to or within the first year of graduate study. Undergraduate courses taken as deficiencies are not considered part of the graduate plan of study.

## Contact Information:

Nutrition and Health Promotion, School of
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http://nursingandhealth.asu.edu/programs/wellness/graduate/ms/index.htm
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480-727-1945

Program Description: The M.S. program in human nutrition is based on the scientific foundations of nutrition, but also prepares students with strong writing skills, computer literacy, interpretive expertise, problem-solving skills and research experiences. Students who have completed an accredited Didactic Program in Dietetics (DPD) may also elect to apply to the ASU dietetic internship in order to meet the requirements to become a registered dietitian.
The primary objective of the graduate program in nutrition is to provide advanced training in nutrition research. Graduate students are expected to develop competencies in research methods and in advanced practice knowledge relevant to their area of study. The skills and knowledge acquired during the course of training should enable each student to develop professional competencies that can be applied to significant problems and issues within the field of nutrition/dietetics.

Degree Requirements: 30 credit hours and a Thesis
The plan of study must contain approved graduate-level work and a thesis. The following courses are required:

- Research methods, NTR 500 and NTR 501. (6)
- Statistics; three to six credit hours from EXW 501, EDP 552/554, STP 530/531/532/533, PSY 529/530 or other approved course.
- Seminars in foods and nutrition (six credit hours from NTR 521/523/525/527/529/598). Seminars reflect the changing nature of research and cover different subject areas each semester. Recent seminars include global nutrition, vegetarianism, public health, immunology, pediatric nutrition, energy balance and weight management and sports nutrition.
- Thesis. (6)

Admission Requirements: Applicants must submit a Graduate College online application.
The following are prerequisites for admission into the program:

- Anatomy and physiology I and II with labs (such as BIO 201 and 202 at ASU).
- Biochemistry (one semester only is required, such as BCH 361 and 367 lab at ASU).
- General chemistry I and II with labs (such as CHM 113 and 116 at ASU).
- General nutrition for majors (such as NTR 241 at ASU).
- Microbiology with lab (such as MIC 205 and 206 at ASU).
- Organic chemistry with lab (one semester only is required, such as CHM 231 and 235 lab at ASU).
- Statistics (any statistics course).


## Contact Information:

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## Nutrition (Dietetics), MS (ECNTRDMS)

Online Degree Search Title: Nutrition (Dietetics) MS
Campus: DTPHX, POLY
Program Description: The dietetics concentration under the M.S. in nutrition is a non-thesis option geared specifically for registered dietitians (R.D.s) seeking to continue their education, advance their skills as practitioners and achieve their career goals. To facilitate the matriculation of working professionals, courses will be offered one evening a week or offered online, and students will have the option of enrolling part- or full-time.
The dietetics concentration under the M.S. in nutrition requires previous work experience as an R.D. to be admitted; however, prospective students will not have to be employed at the time they apply to the program, nor will students have to be employed to maintain in good standing with the program.

Degree Requirements: 30 credit hours including the required course (NTR 593) and an Applied Project

- Required courses (9).
- Required concentration courses (6).
- Elective courses (9).
- Applied project (6).

Admission Requirements: Prospective students must apply online to the Graduate College and applicants must submit the following materials:

- Three letters of recommendation, including at least one from an individual who has employed or supervised the applicant's work.
- A resume that summarizes the academic, volunteer and employment experiences of the applicant and credentialing as a registered dietitian.
- A one to two page, typed, double-spaced, personal statement addressing the following: significant professional responsibilities you have held; your professional goals and reasons for desiring to enroll in this program; your strengths that will help you succeed in this program and in reaching your professional goals; and your personal research interests as specifically as possible.

Credentials submitted by applicants to the M.S. in dietetics program are evaluated by the ASU Graduate College and by the curriculum committee of the nutrition program. The dietetics concentration utilizes a rolling admissions process by conducting ongoing application reviews. Based upon the recommendation of the curriculum committee, applicants will be recommended for admission to the ASU Graduate College by the head of the nutrition program. Applications for the M.S. in nutrition concentration in dietetics will be considered for admission in the upcoming fall or spring semester. Notification of admission to the department's graduate program will be given in late March/early April or late October/early November.
Applicants for the dietetics concentration will receive regular admission status based on the following criteria and when enrollment limits have not been met:

- Current registered dietitian (R.D.) credential by the Commission on Dietetic Registration.
- A minimum of 2,080 hours (equivalent to one year full-time) of work experience in dietetics or a closely related discipline since becoming an R.D.
- Adequate academic preparation.
- Satisfactory and competitive GPA.
- Personal interview (in lieu of GRE scores).
- Favorable letters of recommendation.
- Completed Supplementary Information Form (Appendix A).

The following courses are prerequisites:

- One general nutrition course for majors (e.g., NTR 241 at ASU).
- One microbiology course with laboratory component (e.g., MIC 205 and 206 at ASU).
- Two anatomy and physiology courses with laboratory component (e.g., BIO 201 and 202 at ASU).
- Two general chemistry courses with laboratory components (e.g., CHM 113 and 116 at ASU).
- One organic chemistry course with laboratory component (e.g., CHM 231 and 235 at ASU).
- One biochemistry course with laboratory component (e.g., BCH 361 and 367 at ASU).
- One statistics course.

Each applicant's background/undergrad transcript will be assessed on a case by case basis and, if admitted, deficiency courses will be specified in the admissions letter as needed.

## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/nutrition/
HSC 1386
Nutrition@asu.edu
480-727-1670

## Physical Activity, Nutrition and Wellness, PHD (ECNUTRIPHD)

Online Degree Search Title: Physical Activity, Nutrition, and Wellness (PhD)
Campus: DTPHX, POLY
Program Description: The faculty mentors of the physical activity, nutrition and wellness program offers an interdisciplinary graduate program leading to the doctoral degree in physical activity, nutrition and wellness. The doctoral degree in physical activity, nutrition and wellness is an individualized interdisciplinary program that integrates graduate courses from several academic units to provide a sound foundation for research, leading to a dissertation. The program focuses on issues that contribute to health through the reduction of disease risk, quality of life promotion and enhancement of well being. While many healthy lifestyles are studied, the emphasis is on physically active living and sound nutrition. One of the unique features of this interdisciplinary program is that a student may tailor a course of study to fit individual needs and goals within two main focus areas:

- Physical activity/health promotion.
- Nutrititon/health promotion.

The program prepares research scholars, academic faculty and professionals who study physical activity promotion, healthy lifestyles, nutrition science, exercise science and kinesiology. The program will prepare graduates for careers in higher education, governmental agencies and health-related positions in private industry. The program requires residency and three years of full-time study after the master's degree. Students will be actively involved in research at all stages of their doctoral study through their participation in directed research internships, independent research experiences, seminars/colloquia and dissertation research.

Degree Requirements: 97 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation Requirements are distributed across five areas of study:

- Previously awarded master's degree (30).
- Research and statistics courses (18).
- Elective applied research experience or courses (20).
- Professional development courses (5).
- Concentration courses (12).
- Dissertation (12).

The concentration courses have two focus areas:

- Physical activity/health promotion.
- Nutrition/health promotion.

Students are encouraged to take courses in all areas. At least one class (three credit hours) must be taken in each area. The concentration courses allow students to focus on an interest area (e.g., aging, stress reduction, diabetes, strength, worksite health promotion, physical activity, public health, bioenergetics, weight management, etc.) within the Ph.D. program. The concentration courses are selected by the student in consultation with his or her academic mentor and supervisory committee. It is expected that nine of the 12 credit hours in the concentration will be in a focused content area and that any research projects will reflect these interests. At least three but not more than nine credit hours in the concentration should be taken from a program our department outside the exercise and wellness or nutrition programs.

Admission Requirements: Applicants must submit the Graduate College online application. In addition to meeting Graduate College requirements, applicants must have successfully received a master's degree prior to admission to the Ph.D. program and it is preferable that they have completed a data-based research thesis. Applicants must include the following materials with their online application:

- A letter of intent (indicating research /scholarly goals and designating the name of a potential mentor from a list of approved faculty mentors).
- Statement of career goals.
- GRE scores (verbal, quantitative and writing).
- A six- to 10 -page writing sample.
- A professional resume.
- Three letters of recommendation.
- Teaching/research assistantship application.
- Applicants whose native language is not English must submit a Test of English as a Foreign Language (TOEFL) score unless they meet the requirements for an exception.

Prerequisite courses: Students must have completed the following prerequisite undergraduate and graduate courses prior to admission: anatomy, physiology, human nutrition, upper-division nutrition, upper-division exercise physiology, upper-division motor control/learning, graduate-level research methods and graduate level statistics.
It is expected that students admitted to the program will have a strong disciplinary foundation in either physical activity/wellness, exercise science or nutrition. Individuals lacking background in these areas will be required to make up deficiencies before admission. Other requirements may be necessary depending on the area of study and will be determined by the mentor and executive committee.
Admission decisions are based on the compatibility of the applicant's research interests and career goals with the purpose of the degree program, previous academic training, GPA, GRE scores, recommendations, available funding and a match of research interests with available mentors.
It is expected that doctoral students will spend three years in full-time residence. The intent is to involve and embed students in ongoing research as well as class study. Thus, all doctoral students are to be full-time students and hold part-time appointments (20
hours per week) as a teaching assistant or research assistant. As such, to be accepted into the program, funding must be available and students must have the expertise, experience and willingness to teach courses in the exercise and wellness or nutrition undergraduate curriculum or be a research assistant as funding allows.
Applications are accepted for admission to the fall semester only, with first priority given to completed applications received by Jan. 15.

## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/programs/wellness/graduate/iphd/index.htm
EAW 109
interdisciplinaryphd@asu.edu
480-727-1945

## Public Programs, College of

Applied Ethics and the Professions (Leadership, Management, and Ethics), MA (LAAEPLMEMA)
Online Degree Search Title: Applied Ethics (Ldrshp, Mgmt, and Ethics) MA
Campus: DTPHX
Program Description: Students pursuing the M.A. in applied ethics and the professions concentration, leadership, management and ethics, examine a variety of considerations facing managers and leaders in public, private and nonprofit organizations, and consider the question of how ethical judgments might be made in these settings.
Topics covered include, but are not limited to, the following issues:

- How does management or leadership contribute to the organization's overall sense of social responsibility? Is the manager or leader seeking moral objectives or moral ends, the right policies or outcomes?
- Is the manager or leader doing the right things for the right reasons and with the proper attention to matters of character and integrity?
- What is the relationship between managers or leaders and followers, and how, if at all, does the act of leadership itself appreciably alter the values of the group in a positive way?

Completion of this degree concentration prepares the student to act more ethically and responsibly as an individual in their organization and in society, as well as to help those groups develop more ethical cultures.

Degree Requirements: 30 credit hours including the required course (AEP 593) and an Applied Project
Graduate course work is distributed as follows:

- Elective concentration courses (15).
- Required capstone courses (6).
- Required concentration course (3).
- Required core courses (6).

Admission Requirements: All applicants must submit the Graduate College online application and meet all Graduate College admission criteria, and submit the following:

- GRE, LSAT or MCAT scores.
- Official transcripts from all postsecondary institutions attended.
- Statement of interest in applied ethics and career goals.
- Three letters of recommendation.


## Contact Information:

Public Programs, College of
School of Public Affairs
http://spa.asu.edu/
UCENT 400
spa@asu.edu
602-496-0450

## Campus: DTPHX

Program Description: The School of Social Work graduate certificate in assessment of integrative health modalities will focus on integrative health, the current term used by practitioners in the field who feel strongly that treating the "whole person - body, mind and spirit" is the route to the highest quality of health.
The purpose of the certificate is to enhance students' knowledge of integrative health practices. It will provide students with extensive knowledge of integrative health practices through directed readings in evidence-based journal articles, expert lectures from community health professionals and ASU faculty drawn from across disciplines, field observation, an individual research paper and a mindfulness in-class practice and class interaction that can enhance the quality and effectiveness of treating clients holistically.

Degree Requirements: 15 credit hours
The certificate will require the completion of credits hours distributed among three required courses, including two approved interdisciplinary electives:

SWG 655 Quality of Life
SWG 656 Treating the Whole Person
SWG 657 Ancient Healing Traditions
In addition, after the completion of three approved courses and prior to completing the last course, students are required to complete a research project highlighting their certificate experience.

Admission Requirements: Students interested in applying to this program must submit the online Graduate College application. This certificate is open to professionals in social work, nursing or related health and human service professions from the community, as well as students currently admitted to a health and human services degree program at the master's or doctoral level. A minimum of a bachelor's degree in health or human services or related field is required for entry into the certificate program.

## Contact Information:

Public Programs, College of
School of Social Work
http://ssw.asu.edu/certificates/index.html
UCENT 800
social.work@asu.edu
602-496-0800

## Community Resources and Development, PHD (PPCRDPHD)

## Online Degree Search Title: Community Res and Dev PhD

## Campus: DTPHX

Program Description: The School of Community Resources and Development and the Department of Recreation and Tourism Management offer a graduate program leading to the Ph.D. in community resources and development.
The Ph.D. in community resources and development is a theoretically grounded, research-intensive degree program designed to prepare graduates for research-oriented careers in higher education, governmental agencies, nonprofit organizations and private sector businesses. The program is based on the concept of building sustainable and healthy communities as the unifying principle in the established focus areas of:

- Community studies.
- Nonprofit leadership and management.
- Parks, recreation and leisure.
- Tourism development and management.

The theoretical and methodological approaches embedded in this program serve to integrate scholarship in these areas in order to gain a more meaningful understanding of, and impact on, community life and dynamics. The program is interdisciplinary in nature. The core faculty engaged in this program is housed in the School of Community Resources and Development at the Downtown Phoenix campus. In addition, the Ph.D. builds on current collaborations with faculty with related research interests from many ASU departments, schools and centers.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation Up to 30 hours from a previously awarded master's can count toward the Ph.D. requirements. All students are advised initially by the Ph.D. graduate program director as a cohort. Students are required to take 18 credit hours of core course work, 15 hours of
which are with the cohort, during the first year. Students are assigned an individual advisor/mentor at the end of the first year of study. A supervisory committee is also formed at the end of the first year which reflects the interests of the student and faculty. Each student develops his or her program of study in consultation with the Ph.D. graduate program coordinator, advisor and supervisory committee. Students complete at least 12 credit hours of elective course work, including courses from contributing disciplines, selected in consultation with their advisor to foster the interdisciplinary nature of the degree program. Students can also complete at least 12 hours of CRD 792 Research and 12 hours of CRD 799 Dissertation. When the majority of course work has been completed and before dissertation research is started, students must complete a written examination followed by an oral examination. These examinations must be completed within five years of admission.

Admission Requirements: Applications are reviewed by the admissions committee and recommendations for admission are then made by the graduate program director to the dean of the Graduate College. Minimum Graduate College requirements must be met. Additionally, each applicant must provide:

- A current and professional resume.
- A statement of academic and professional goals in sufficient detail to indicate compatibility with the educational objectives and capabilities of the Ph.D. program.
- GRE test scores.
- International applicants are also required to submit Test of English as a Foreign Language (TOEFL) scores and a financial guarantee statement.
- Three letters of recommendation are required. The letters may be a mix of academic and professional references, but each must address the applicant's capacity to successfully complete the doctoral program.

Admissions recommendations are made only once a year, with admitted students beginning in the fall semester. To assure consideration for the ensuing fall semester, candidates should submit their application, graduate assistantship and tuition waiver by February. 1. Students applying to the program are expected to have a master's degree from an accredited institution which included a master's-level research methods and statistics class or classes. If deficiencies exist in community resource and developmentrelated course work at the master's level, appropriate classes are suggested.

## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://scrd.asu.edu
UCENT 550
scrd@asu.edu
602-496-0550

## Criminal Justice, MA (PPCRIMJMA)

Online Degree Search Title: Criminal Justice (MA)
Campus: DTPHX, ONLNE
Program Description: The M.A. in criminology and criminal justice is designed to provide criminal justice agency professionals with course work in criminology and the operation of the criminal justice system, and training in research methods and statistics. The degree program also provides students with advanced training in program planning and management, policy analysis and program evaluation.

Degree Requirements: 33 credit hours including a Capstone
The program includes 12 credit hours of required core courses, a three-credit-hour capstone project and 18 credit hours of electives. Students can develop specializations in areas such as policing, corrections and management by combining required and elective course work.
Core Courses
CRJ 501 Seminar in Criminal Justice (3)
CRJ 502 Seminar in Criminology (3)
CRJ 503 Research Methods for Criminal Justice (3)
CRJ 504 Statistical Tools for Criminal Justice (3)
Capstone Course
CRJ 505 Theory and Practice in Criminal Justice (3)
Electives

Choose six in consultation with the supervisory committee. Students select a minimum of 18 hours of elective course work. Students may take either 500-level or, with the permission of the instructor, 600-level courses.
CRJ 510 Criminal Justice Planning and Program Evaluation
CRJ 511 Applied Data Analysis in Criminal Justice
CRJ 512 Seminar on Policing
CRJ 513 Seminar on Courts and Sentencing
CRJ 514 Seminar in Corrections
CRJ 515 Seminar on Women and Crime
CRJ 516 Seminar in Criminal Justice Organization and Management
CRJ 517 Seminar on Juvenile Delinquency and Juvenile Justice
CRJ 518 Seminar on Race/Ethnicity, Crime and Justice
CRJ 519 Seminar on Victimization
CRJ 520 Seminar on Violent Crime and Criminal Behavior
CRJ 521 Seminar on the Nature of Crime
CRJ 522 Seminar on Gangs and Crime
CRJ 524 Seminar on Punishment and Society
CRJ 525 Seminar on Life-Course Criminology
CRJ 584 Internship
CRJ 590 Reading and Conference*
CRJ 592 Research
CRJ 598 Special Topics on Crime and Criminal Justice
CRJ 601 Seminar on Criminological Theory
CRJ 602 Seminar on Criminal Justice Policies and Practices
CRJ 603 Advanced Research Design
CRJ 605 Special Topics in Quantitative Methods
CRJ 606 Advanced Topics in Theoretical Criminology
CRJ 607 Advanced Topics in Policing
CRJ 608 Advanced Topics in Courts and Sentencing
CRJ 609 Advanced Topics in Corrections
CRJ 610 Advanced Topics in Juvenile Justice
CRJ 611 Advanced Topics in Crime and Victimization
CRJ 612 Advanced Topics in Race, Gender, Class, and Justice
CRJ 613 Qualitative Methods
*A maximum of 3 hours of CRJ 590 may be included on the program of study.

Admission Requirements: Students must submit an online application for admission, an official transcript from every university or institution attended and the application fee to the Graduate College. The suggested application deadlines are April 1 for fall semester and November 1 for spring semester.
In addition to the application material required by the Graduate College, applicants must submit 1) two letters of recommendation, and 2) a personal statement that addresses the applicant's prior education and professional experience, discusses the applicant's career goals and explains how the degree will help the applicant achieve those goals. The personal statement is submitted online. Personal statement and letters of recommendation should be submitted online.

## Contact Information:

Public Programs, College of
School of Criminology and Criminal Justice
http://ccj.asu.edu/degree-programs/ma
UCENT 600
sccj@asu.edu
602-496-2365

## Criminology and Criminal Justice, MS (PPCRJMS)

Online Degree Search Title: Criminology and Criminal Justice (MS)
Campus: DTPHX

Program Description: The M.S. in criminology and criminal justice is a research degree designed to provide students with a high level of theoretical and empirical knowledge about crime and criminal justice. The program also is designed to provide students with the
advanced research skills needed for careers as criminal justice researchers and continued study in doctoral programs in criminology or criminal justice. The degree consists of 24 credit hours of course work and a six-hour thesis.

Degree Requirements: 30 credit hours and a Thesis

Required hours for this program includes 24 credit hours of course work and six credit hours of thesis. There are five required courses. Each student will write a thesis that reflects original research and scholarship, makes a contribution to knowledge in the field and demonstrates his/her ability to design and carry out an independent research project.
Core Courses

CRJ 501 Seminar in Criminal Justice (3)
CRJ 502 Seminar in Criminology (3)
CRJ 503 Research methods for Criminal Justice (3)
CRJ 504 Statistical Tools for Criminal Justice (3)
CRJ 604 Advanced Statistical Analysis (3)

Electives
Choose three in consultation with the supervisory committee (9). Students select a minimum of 9 hours of elective course work. Students may take either 500-level or, with the permission of the instructor, 600-level courses.
CRJ 510 Criminal Justice Planning and Program Evaluation
CRJ 511 Applied Data Analysis in Criminal Justice
CRJ 512 Seminar on Policing
CRJ 513 Seminar on Courts and Sentencing
CRJ 514 Seminar in Corrections
CRJ 515 Seminar on Women and Crime
CRJ 516 Seminar in Criminal Justice Organization and Management
CRJ 517 Seminar on Juvenile Delinquency and Juvenile Justice
CRJ 518 Seminar on Race/Ethnicity, Crime and Justice
CRJ 519 Seminar on Victimization
CRJ 520 Seminar on Violent Crime and Criminal Behavior
CRJ 521 Seminar on the Nature of Crime
CRJ 522 Seminar on Gangs and Crime
CRJ 524 Seminar on Punishment and Society
CRJ 525 Seminar on Life-Course Criminology
CRJ 584 Internship
CRJ 590 Reading and Conference*
CRJ 592 Research
CRJ 598 Special Topics on Crime and Criminal Justice
CRJ 601 Seminar on Criminological Theory
CRJ 602 Seminar on Criminal Justice Policies and Practices
CRJ 603 Advanced Research Design
CRJ 605 Special Topics in Quantitative Methods
CRJ 606 Advanced Topics in Theoretical Criminology
CRJ 607 Advanced Topics in Policing
CRJ 608 Advanced Topics in Courts and Sentencing
CRJ 609 Advanced Topics in Corrections
CRJ 610 Advanced Topics in Juvenile Justice
CRJ 611 Advanced Topics in Crime and Victimization
CRJ 612 Advanced Topics in Race, Gender, Class, and Justice
CRJ 613 Qualitative Methods
*A maximum of 3 hours of CRJ 590 may be included on the program of study.
Thesis (6)
Admission Requirements: Students must submit an online application for admission, an official transcript from every university or institution attended, GRE scores and the application fee to the Graduate College. The suggested application deadlines are April 1 for fall semester and Nov. 1 for spring semester.

In addition to the application material required by the Graduate College, applicants must submit 1) two letters of recommendations, and 2) a personal statement that addresses the applicant's prior education and professional experience, discusses the applicant's career goals and explains how the degree will help the applicant achieve these goals.
Personal statement and letters of recommendation should be submitted online.

## Contact Information:

Public Programs, College of
School of Criminology and Criminal Justice
http://ccj.asu.edu/degree-programs/ms
UCENT 600
sccj@asu.edu
602-496-2365

## Criminology and Criminal Justice, PHD (PPCRJPHD)

Online Degree Search Title: Criminology and Criminal Justice (PhD)
Campus: DTPHX
Program Description: The School of Criminology and Criminal Justice at Arizona State University offers a program of course work and research leading to the Ph.D. in criminology and criminal justice. This program emphasizes criminal justice theory, research and policy. The program is designed to produce highly skilled criminology and criminal justice faculty and agency researchers and administrators.
The Ph.D. in criminology and criminal justice program is organized around five components:

- A core of required courses in theory and research on crime and the criminal justice system.
- A core of required courses on research methods and analytical techniques.
- Elective courses in criminology, criminal justice and related fields.
- A comprehensive examination.
- A dissertation.

Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation
The Ph.D. in criminology and criminal justice includes a minimum of 72 credit hours of course work and 12 credit hours (and only 12) of dissertation. A maximum of 30 credit hours of course work from a previously awarded master's degree or J.D. may, with the approval of the supervisory committee, be applied toward the doctoral program of study.
Each student is required to complete course work in two core areas. This includes six credit hours of course work in theory and research on crime and the criminal justice system and nine credit hours of course work on research methods and analytical techniques. Elective courses comprise the remainder of the course work required for the Ph.D. All students must demonstrate proficiency in research design and quantitative/qualitative methods.
Core Courses
CRJ 601 Seminar on Criminological Theory (3)
CRJ 602 Seminar on Criminal Justice Policies and Practices (3)
CRJ 603 Advanced Research Design (3)
CRJ 604 Advanced Statistical Analysis (3)
CRJ 605 Special Problems in Quantitative Methods (3)

Electives
Choose a minimum of nine courses in consultation with the supervisory committee (27)
Dissertation (12)
Credit hours for course work from master's degree or J.D. (30)
Admission Requirements: Students must submit an online application for admission, an official transcript from every university or institution from which a degree was awarded, GRE scores and the application fee to the Graduate College. The application deadline is Feb. 1 for fall semester. Students are not admitted during the spring semester.
In addition to these basic requirements established by the Graduate College, the School of Criminology and Criminal Justice requires the following:

- A master's degree or a J.D. earned from an accredited institution. The master's degree may be a degree in criminal justice, criminology or another field (e.g., sociology, political science, history, social work, public administration, psychology or philosophy).
- Outstanding students with a bachelor's degree may be admitted directly into the Ph.D. program. These students' work will be reviewed after completion of 30 credit hours of graduate course work. Students whose work passes the review are awarded the master's in passing.
- Two letters of reference from faculty members or others qualified to evaluate the applicant's academic potential for doctoral study.
- A resume.
- A personal statement, not exceeding five pages, that describes the applicant's prior education, relevant professional experience, and career goals, and that explains how the Ph.D. in criminology and criminal justice will help the applicant attain his/her career goals. The statement should explicitly explain how the student's plans are consistent with the role and mission of the School of Criminology and Criminal Justice at ASU.
- International students seeking admission to the program must meet ASU graduate faculty requirements governing the admission of international students, which can be found at http://graduate.asu.edu/admissions/international.

Personal statement and letters of recommendation should be submitted online.

## Contact Information:

Public Programs, College of
School of Criminology and Criminal Justice
http://ccj.asu.edu/degree-programs/phd
UCENT 600
sccj@asu.edu
602-496-2365

## Latino Cultural Competency in Social Work (certificate), CERT (PPSWGGRCL)

Online Degree Search Title: Latino Cultural Competency in Social Work (Grad Certificate) Campus: DTPHX

Program Description: In response to the need, ASU through the College of Public Programs, School of Social Work, offers a graduate certificate in Latino cultural competency. The School of Social Work offers Latino-oriented courses with an emphasis on Spanish language development for professional social workers.
The goal of the program is to enhance a social worker professional's capacity for engaging in culturally grounded practice with Latino clients and their families.
The program is intended for the professional who wants to:

- Expand their employment potential by adding an expertise in professional services with Latinos.
- Learn the critical cross-cultural factors that influence a worker's competency in forming professional helping relationships with Latinos.
- Learn the social/cultural context and theoretical principles of social work practice with Latinos.
- Learn the social service delivery issues involved in providing services for bilingual and limited- or non-English-speaking Latino populations.

Degree Requirements: 15 credit hours

## Requirements:

- Completion of 480 hours of field practicum with Latino clients/communities ( 60 percent of case load is to be Spanishspeaking).
- Field practice, six credit hours of field practicum.
- Latino-oriented course work, six credit hours of Latino oriented course work. At least three hours are required to be taken from within the School of Social Work.
- Social work course work, three credit hours: diversity and oppression in a social work context.

For a community professional social worker and community worker, the Latino cultural competency graduate certificate requires 15 credit hours of course work.
Requirements:

- Field Practice, six credit hours of independent study field practice, completion of 480 hours of field practice with Latino clients/communities ( 60 percent of client caseload is to be Spanish-speaking). May petition to use place of employment.
- Latino-oriented course work, six semester hours of Latino-oriented course work. At least three hours are required to be taken from within the School of Social Work.
- Social work course work, three credit hours: diversity and oppression in a social work context, an M.S.W. or B.S.W. professional who has completed this course in the past five years may substitute this course with a Latino-oriented course.

Admission Requirements: Students interested in applying to this program must submit a Graduate College online application. Option one, social work graduate student admissions requirements: graduate status in the College of Public Programs' School of Social Work and demonstrated proficiency in Spanish language.
Option two, community professional social worker admissions requirements: possess a M.S.W., B.S.W. or related master's degree and demonstrated proficiency in Spanish language.
Option three, community worker admissions requirements: the equivalency of a two-year work experience in the social service field, undergraduate degree, demonstrated proficiency in Spanish language.

## Contact Information:

Public Programs, College of
School of Social Work
http://ssw.asu.edu/
UCENT 800
social.work@asu.edu
602-496-0800

## Nonprofit Leadership and Management (certificate), CERT (PPNONPROCE)

Online Degree Search Title: NonProfit Leadership and Management (Grad Certificate)
Campus: DTPHX

Program Description: The graduate certificate in nonprofit leadership and management, offered through the College of Public Programs, is a graduate program that provides students with an understanding of the nonprofit sector's role in society and with the skills necessary for effective leadership and management of these organizations. The objective of this program is to provide students with professional skills needed by leaders in the nonprofit sector, including the understanding of the historical and philosophical context for nonprofit organizations in society, the management of human resources (paid and volunteer), the theory and practice of philanthropy, financial management practices and other topical content areas.

Degree Requirements: 15 credit hours
Three Required Courses (9)
NLM 510 Foundations of Nonprofit Management
NLM 520 Financial Management in Nonprofit Organizations
NLM 540 Volunteer and Human Resources in Nonprofit Organizations
Two Elective Courses (6)

Admission Requirements: All applicants must submit the Graduate College online application. The program is available to students who are pursuing their graduate degree in a chosen field of study and who have expressed interest in pursuing careers in the nonprofit sector. In addition, the program is well suited for working professionals, who may be pursuing a graduate degree, but who wish to strengthen their skills and connections to the nonprofit community. All applicants must have two years of demonstrable nonprofit experience to obtain the graduate certificate.
For more information, see the college website.
For U.S. Department of Education Gainful Employment Program Disclosure information, see
http://catalog.asu.edu/files/shared/GE_Disclosure_PPNONPROCE.pdf.

## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://nonprofit.asu.edu
UCENT 500
nonprofit@asu.edu
602-496-0500

## Nonprofit Studies, MNPS (PPNPSMNS)

Online Degree Search Title: Nonprofit Studies (MNpS)
Campus: DTPHX
Program Description: The M.Np.S. program is intended for professionals who work in or desire to work in the nonprofit sector. The degree program provides an opportunity to obtain an advanced degree that addresses the unique character of nonprofit
organizations and the social sector. Students interested in nonprofit management and social sector organizations explore research, theory and the practice of management and leadership in the nonprofit sector.

Degree Requirements: 33 credit hours including a Capstone Course (NLM 620)
Students are required to take 18 credit hours of core course work, in which three hours are a capstone course that is completed at the end of the program of study. The capstone course is integrative and case-based, allowing students to synthesize material from prior course work. Successful completion of this course is required in place of a thesis or applied project.
Students complete 15 credit hours of related elective course work. Courses are selected from two contributing disciplines (public affairs and social work) to foster the interdisciplinary nature of the degree. Students may include two 3 credit hour courses not listed below as approved electives in their program of study as long as the student can establish an intellectual and professional development objective that substantiates the course selection.
NLM 510 Foundations in Nonprofit Management (3)
NLM 520 Financial Management in Nonprofit (3)
NLM 530 Program Evaluation and Information Management
NLM 540 Volunteer and Human Resource Management in Nonprofit (3)
NLM 550 Philanthropy: Theory and Practice (3)
NLM 620 Capstone: Critical Issues in Nonprofit Management (3)
Electives (15)

Admission Requirements: Potential applicants who hold a bachelor's degree from a regionally-accredited institution are eligible to apply. Applications are accepted year-round and students are granted admission for fall, spring or summer semesters. Students must submit the following to apply for the M.Np.S.:

- A curriculum vitae or resume.
- Completed online application to the Graduate College.
- Statement of educational and career goals in sufficient detail to indicate compatibility with the educational objectives and capabilities of the school.
- Three reference letters.

Applicants whose junior/senior GPA is 3.00 or higher are eligible to apply for admission to the program. Certificate students who are interested in applying for the M.Np.S. program must apply to the degree program before the completion of nine credit hours in their certificate program.

## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://nonprofit.asu.edu
UCENT
nonprofit@asu.edu
602-496-0500

## Public Administration, MPA (PPPADTMPA)

Online Degree Search Title: Public Administration (MPA) - Downtown Phoenix Campus: DTPHX

Program Description: The M.P.A. is an interdisciplinary, professional degree program designed to prepare students for public service, public management and policy analysis at the local, state and national levels of government. The M.P.A. program is accredited by the National Association of Schools of Public Affairs and Administration.
Students may also elect to specialize in one of two of the approved M.P.A. concentrations, 1) urban management: http://spa.asu.edu/new/mpa/mpa_urban_management.htm, or 2) nonprofit administration:
http://spa.asu.edu/new/mpa/mpa_nonprofit.htm.
The urban management concentration provides knowledge and skills for students seeking careers in local urban government management and enables students to develop the skills and techniques used by city and urban leaders and managers.
The concentration in nonprofit administration is intended for professionals who work in or desire to work in the nonprofit sector and who wish to explore research, theory and the practice of management and leadership in the nonprofit sector. In addition, the school offers a dual M.P.A./M.S.W. program (http://spa.asu.edu/new/mpa/mpa_msw.htm) with the School of Social Work.

Degree Requirements: 42 credit hours including a Capstone (PAF 509)

Students take 27 of these hours in nine core classes in the School of Public Affairs, and 15 additional hours in elective courses. No more than nine credit hours of ASU graduate courses taken before admission to the school and approved by the M.P.A./M.P.P. committee can be included in the program of study.
Students enrolling in core courses must demonstrate minimum competency in statistics and American government. Courses taken to fulfill the competency do not count toward the 42-hour degree program. Competency in statistics is met with a grade of "B" (3.00) or higher in an approved course (PAF 401, POS 401, PSY 230, QBA 221, SOC 390 or SWU 321) within the last two years or passing a diagnostic test approved by the M.P.A./M.P.P. committee. Other courses taken within the last two years may be substituted upon approval of the M.P.A./M.P.P. director.
Competency in American government is met through an undergraduate class in American government (PAF 110, PAF 300, POS 310, POS 340 or a similar course).

Admission Requirements: Applicants to the M.P.A. program are accepted year-round. Students may be granted admission for fall, spring and summer semesters.
All applicants must submit the following materials to the School of Public Affairs:

- Applicants may also submit a resume or other documents.
- Three letters of recommendation (at least two should be faculty who can evaluate applicant's academic performance), there is no form required for the letters of recommendation.
- Written statement of applicant's educational and career goals (this is also used as a sample of the applicant's writing abilities), and should be between one and two pages in length.

Mail materials to:
ASU School of Public Affairs
Mail Code 3720
411 N. Central Avenue, Ste. 400
Phoenix, AZ 85004-0687
All applicants must submit the following materials to the ASU Graduate College:

- An official ASU Graduate online application.
- Application fee.
- International applicants must also submit acceptable TOEFL scores or IELTS scores.
- Official transcripts of all undergraduate and graduate work.
- Scores on the GRE (verbal, quantitative, analytical).

Send transcripts to:
Arizona State University
Graduate College Admissions
Interdisciplinary Building, B-Wing, Room 170
P.O. Box 871003

Tempe, AZ 85287-1003

## Contact Information:

Public Programs, College of
School of Public Affairs
http://spa.asu.edu/new/mpa/default.htm
UCENT 400
spa@asu.edu
602-496-0450

## Public Administration, PHD (PPPUBADPHD)

Online Degree Search Title: Public Administration (PhD) Campus: DTPHX

Program Description: The School of Public Affairs offers a graduate program leading to the Ph.D. in public administration.
The mission of the Ph.D. program in public administration is to prepare students for an academic career as a researcher, teacher and member of the academic community.
The degree is also be appropriate for practitioners who want to conduct high level research and policy development in public and nonprofit agencies, foundations and research institutes. Accordingly, the Ph.D. program curriculum is theoretically grounded and research based. The program emphasizes:

- The application of normative and empirical approaches to improving democratic governance and advancing the public interest.
- The development of skills necessary to produce and disseminate new knowledge in the field of public administration.
- The use of alternative theoretical frameworks and research methodologies to define, understand and develop solutions to public problems.

While the Ph.D. program is located in the School of Public Affairs, students are encouraged to tailor a course of study to fit individual needs and goals by drawing on faculty from across the university.

Degree Requirements: 96 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation Students must have a Master of Public Administration or Master of Public Policy degree.
Other master's degree may qualify, although students are required to cover certain prerequisite courses. The program consists of a minimum of 96 credit hours of graduate work with 30 of the 96 hours being satisfied by the student's master's degree. The remaining 66 hours are composed of 42 hours of graduate course work, 12 hours of dissertation, and 12 hours of research. Students are required to complete course work in two areas of specialization. These specializations are developed in consultation with the student's Plan of Study Committee and can focus on a variety of topics related to public administration and public policy. Students may work with faculty from other departments, if appropriate, to complete their specializations.
As an alternative, students may opt for the urbanism concentration.

Admission Requirements: All applicants are expected to have completed graduate level statistics and research methods classes before admission. Applicants also are expected to have sufficient formal course work in public administration to pursue doctoral study in the field. Admitted students may be required to take deficiency courses as specified by the admissions committee before beginning the doctoral core classes.
Applicants are admitted for fall only. Admission is competitive; a limited number of well-qualified applicants will be admitted each year. A completed application packet is due by Jan. 15.
All applicants must submit the following materials to the ASU Graduate College:

- An official online ASU Graduate application.
- Application fee.
- International students must submit Test of English as a Foreign Language (TOEFL) and Test of Spoken English (TSE) scores to be considered for admission. This is true even for those who have a master's degree from a U.S. university. To be considered for admission, the minimum score on the traditional TOEFL test is 600 . Applicants with TOEFL scores below 600 or who do not submit a TSE score (or Internet-based TOEFL) will not be admitted. Only test scores from within the past five years will be accepted.
- Official transcripts of all undergraduate and graduate work.
- Scores on the GRE (verbal, quantitative, analytical).

Send transcripts to:
Arizona State University
Graduate College
Interdisciplinary Building, B-Wing, Room 170
P.O. Box 871003

Tempe, AZ 85287-1003
In addition to the above, applicants submit the following materials directly to the Ph.D. program:
A current resume or curriculum vitae.

- Three letters of recommendation. These should be primarily academic letters. All letters should address the candidate's capacity to successfully complete the doctoral program. They should assess the student's capacity for critical and analytic thought, their ability to communicate effectively, both orally and in writing and their commitment to completion of the program.
- Samples of research reports and/or papers (optional).
- A written statement of your areas of interest and your educational and career goals. You have the option of including the names of one to three ASU faculty members and why their research is of interest to you. Your specific choices will not affect admission and you will not be committed to working with these faculty members, but your choices are another way of indicating your interests.

Mail materials to:
ASU School of Public Affairs
Mail Code 3720
411 N. Central Avenue, Ste. 400
Phoenix, AZ 85004-0687

## Contact Information:

Public Programs, College of

School of Public Affairs
http://spa.asu.edu/new/phd/default.htm
UCENT 400
spa@asu.edu
602-496-0450

## Public Administration (Nonprofit Administration), MPA (PPNONPRMPA)

Online Degree Search Title: Public Administration (NonProfit Administration) (MPA)
Campus: DTPHX
Program Description: The M.P.A. is an interdisciplinary, professional degree program designed to prepare students for public service, public management, and policy analysis at the local, state and national levels of government. The M.P.A. program is accredited by the National Association of Schools of Public Affairs and Administration.
Students may also elect to specialize in one of two of the approved M.P.A. concentrations, 1) urban management, see
http://spa.asu.edu/new/mpa/mpa_urban_management.htm, and 2) nonprofit management, see
http://spa.asu.edu/new/mpa/mpa_nonprofit.htm.
The urban management concentration provides knowledge and skills for students seeking careers in local urban government management and enables students to develop the skills and techniques used by city and urban leaders and managers.
The concentration in nonprofit administration is intended for professionals who work in or desire to work in the nonprofit sector and who wish to explore research, theory, and the practice of management and leadership in the nonprofit sector. In addition, the school offers a dual M.P.A./M.S.W. program with the School of Social Work, see http://spa.asu.edu/new/mpa/mpa_msw.htm.

Degree Requirements: 42 credit hours including a Capstone (PAF 509)
Students take 24 of these hours in eight core classes in the School of Public Affairs, 12 hours in concentration courses, and six additional elective hours. No more than nine credit hours of ASU graduate courses taken before admission to the school and approved by the M.P.A./M.P.P. committee can be included in the program of study.
Students enrolling in core courses must demonstrate minimum competency in statistics and American government. Courses taken to fulfill the competency do not count toward the 42 -hour degree program. Competency in statistics is met with a grade of " $B$ " (3.00) or higher in an approved course (PAF 401, POS 401, PSY 230, QBA 221, SOC 390 or SWU 321) within the last two years or passing a diagnostic test approved by the M.P.A./M.P.P. committee. Other courses taken within the last two years may be substituted upon approval of the M.P.A./M.P.P. director.
Competency in American government is met through an undergraduate class in American government (PAF 110, PAF 300, POS 310, POS 340) or a similar course.

Admission Requirements: Applicants to the M.P.A. program are accepted all year. Students may be granted admission for fall, spring and summer semesters.
All applicants must submit the following materials to the School of Public Affairs:

- Applicants may also submit a resume or other documents.
- Three letters of recommendation; at least two should be faculty who can evaluate applicant's academic performance. There is no form required for the letters of recommendation.
- Written statement of applicant's educational and career goals, and should be between one and two pages in length. This is also used as a sample of the applicant's writing abilities.

Mail materials to:
ASU School of Public Affairs
Mail Code 3720
411 N. Central Avenue, Ste. 400
Phoenix, AZ 85004-0687
All applicants must submit the following materials to the ASU Graduate College:

- An official online ASU Graduate application.
- Application fee.
- International applicants must also submit acceptable Test of English as a Foreign Language (TOEFL) scores or International Enlish Language Testing System (IELTS) scores.
- Official transcripts of all undergraduate and graduate work.
- Scores on the GRE (verbal, quantitative, analytical).

Send transcripts to:
Arizona State University
Graduate College
Admissions
Interdisciplinary Building, B-Wing, Room 170
P.O. Box 871003

Tempe, AZ 85287-1003

## Contact Information:

Public Programs, College of
School of Public Affairs
http://spa.asu.edu/new/mpa/default.htm
UCENT 400
spa@asu.edu
602-496-0450

## Public Administration (Urban Management), MPA (PPPAFUMPA)

Online Degree Search Title: Public Administration (Urban Management) (MPA)
Campus: DTPHX

Program Description: The M.P.A. is an interdisciplinary, professional degree program designed to prepare students for public service, public management and policy analysis at the local, state and national levels of government. The M.P.A. program is accredited by the National Association of Schools of Public Affairs and Administration.
Students may also elect to specialize in one of two of the approved M.P.A. concentrations, 1) urban management:
http://spa.asu.edu/new/mpa/mpa_urban_management.htm, or 2) nonporfit administration:
http://spa.asu.edu/new/mpa/mpa_nonprofit.htm.
The urban management concentration provides knowledge and skills for students seeking careers in local urban government management and enables students to develop the skills and techniques used by city and urban leaders and managers.
The concentration in nonprofit administration is intended for professionals who work in or desire to work in the nonprofit sector and who wish to explore the research, theory and practice of management and leadership in the nonprofit sector. In addition, the school offers a dual M.P.A./M.S.W. program (http://spa.asu.edu/new/mpa/mpa_msw.htm) with the School of Social Work.

Degree Requirements: 42 credit hours including a Capstone Course (PAF 509)
M.P.A. students pursuing the urban management concentration take 27 hours in nine core classes in the School of Public Affairs, 12 hours in four concentration classes, and three hours in one approved elective course. No more than nine credit hours of ASU graduate courses taken before admission to the school and approved by the M.P.A./M.P.P. committee can be included in the program of study.
Students enrolling in core courses must demonstrate minimum competency in statistics and American government. Courses taken to fulfill the competency do not count toward the 42 -hour degree program. Competency in statistics is met with a grade of " B " ( 3.00 on a 4.00 scale) or higher in an approved course (PAF 401, POS 401, PSY 230, QBA 221, SOC 390 or SWU 321) within the last two years or passing a diagnostic test approved by the M.P.A./M.P.P. committee. Other courses taken within the last two years may be substituted upon approval of the M.P.A./M.P.P. director.
Competency in American government is met through an undergraduate class in American government (PAF 110, PAF 300, POS 310, POS 340, or a similar course).

Admission Requirements: Applicants to the M.P.A. program are accepted year-round. Students may be granted admission for fall, spring and summer semesters.
All applicants must submit the following materials to the School of Public Affairs:

- Applicants may also submit a resume or other documents.
- Three letters of recommendation. At least two should be faculty who can evaluate applicant's academic performance. There is no form required for the letters of recommendation.
- Written statement of applicant's educational and career goals, between one and two pages in length. This is also used as a sample of the applicant's writing abilities.

Mail materials to:
ASU School of Public Affairs
Mail Code 3720
411 N. Central Avenue, Ste. 400

All applicants must submit the following materials to the ASU Graduate College:

- An official online ASU graduate application.
- Application fee.
- International applicants must also submit acceptable Test of English as a Foreign Language (TOEFL) scores or IELTS scores.
- Official transcripts of all undergraduate and graduate work.
- Scores on the GRE (verbal, quantitative, analytical).

Send transcripts to:
Arizona State University
Graduate College
Interdisciplinary Building, B-Wing, Room 170
P.O. Box 871003

Tempe, AZ 85287-1003

## Contact Information:

Public Programs, College of
School of Public Affairs
http://spa.asu.edu/new/mpa/default.htm
UCENT 400
spa@asu.edu
602-496-0450

## Public Administration (Urbanism), PHD (PPPAURBPHD)

Online Degree Search Title: Public Administration (Urbanism) PHD Campus: DTPHX

Program Description: The mission of the Ph.D. program in public administration is to prepare students for an academic career as a researcher, teacher and member of the academic community. The degree is also be appropriate for practitioners who want to conduct high level research and policy development in public and nonprofit agencies, foundations, and research institutes. Accordingly, the Ph.D. program curriculum is theoretically grounded and research based. The program emphasizes:

- The application of normative and empirical approaches to improving democratic governance and advancing the public interest.
- The development of skills necessary to produce and disseminate new knowledge in the field of public administration.
- The use of alternative theoretical frameworks and research methodologies to define, understand and develop solutions to public problems.

The concentration in urbanism is a mechanism for organizing varied perspectives on urbanism into a collective body of scholarship. The study of Public Administration is enriched by grounding it in a comprehensive understanding of the characteristics of urban context and the dynamic forces that shape them.
The concentration in urbanism leverages the varied interests in urbanism and help emerging scholars as they attempt to compare, contrast and take stock of urbanism. Working with faculty from across a range of departments and programs at ASU, doctoral students will be able to capture the creative tensions that scholarship on urbanism has inspired in order to stimulate a provocative, constructive kind of inquiry.

Degree Requirements: 96 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation Students must have a Master of Public Administration or Master of Public Policy degree. Other master's degree may qualify, although students are required to cover certain prerequisite courses. The program consists of a minimum of 96 credit hours of graduate work with 30 of the 96 hours being satisfied by the student's master's degree. The remaining 66 hours are composed of 42 hours of graduate course work, 12 hours of dissertation, and 12 hours of research.
Students are required to complete course work in two areas of specialization. Twelve hours are completed in urbanism courses. A second specialization of nine hours is also completed. These specializations are developed in consultation with the student's Plan of Study committee and can focus on a variety of topics related to public administration and public policy. Students may work with faculty from other departments, if appropriate, to complete their specializations.

Admission Requirements: Applicants must apply to the Graduate College for admission to the urbanism concentration program under the Ph.D. in public administration and meet the Graduate College criteria as well as Ph.D. program criteria for admission. The successful candidate for admission to the Ph.D. program has a M.P.A. or M.P.P. Other master's degree may qualify, although
students are required to cover certain prerequisite courses. The additional expectation for admission to the concentration is a strong interest in urban affairs as indicated in the applicant's written statement of educational and career goals.
Applicants are admitted for fall only. Admission is competitive; a limited number of well-qualified applicants will be admitted each year. A completed application packet is due by Jan. 15.
All applicants must submit the following materials to the ASU Graduate College:

- An official online ASU Graduate application.
- Application fee.
- International students must submit Test of English as a Foreign Language (TOEFL) and Test of Spoken English (TSE) scores to be considered for admission. This is true even for those who have a master's degree from a U.S. university. To be considered for admission, the minimum score on the traditional TOEFL test is 600 . Applicants with TOEFL scores below 600 or who do not submit a TSE score (or Internet-based TOEFL) will not be admitted. Only test scores from within the past five years will be accepted.
- Official transcripts of all undergraduate and graduate work.
- Scores on the GRE (verbal, quantitative, analytical).

Send transcripts to:
Arizona State University
Graduate College
Interdisciplinary Building, B-Wing, Room 170
P.O. Box 871003

Tempe, AZ 85287-1003

In addition to the above, applicants submit the following materials directly to the Ph.D. program:

- A current resume or curriculum vitae.
- A written statement of your areas of interest and your educational and career goals. You have the option of including the names of one to three ASU faculty members and why their research is of interest to you. Your specific choices will not affect admission and you will not be committed to working with these faculty members, but your choices are another way of indicating your interests.
- Samples of research reports and/or papers (optional).
- Three letters of recommendation. These should be primarily academic letters. All letters should address the candidate's capacity to successfully complete the doctoral program. They should assess the student's capacity for critical and analytic thought, their ability to communicate effectively, both orally and in writing and their commitment to completion of the program.

Mail materials to:
ASU School of Public Affairs
Mail Code 3720
411 N. Central Avenue, Ste. 400
Phoenix, AZ 85004-0687

## Contact Information:

Public Programs, College of
School of Public Affairs
http://spa.asu.edu/new/phd/urbanism.htm
UCENT 400
spa@asu.edu
602-496-0450

## Public Policy, MPP (PPPUBPMPP)

Online Degree Search Title: Public Policy (MPP) Campus: DTPHX

Program Description: The M.P.P. program allows students to approach the study of public policy with a focus on public policy in the urban setting. The M.P.P. program prepares students for professional careers as policy analysts and leaders in public service involved in the formulation, approval, implementation and evaluation of public policy at all levels of government and in the private and nonprofit sectors. It can also serve as a platform for preparation for doctoral studies in public policy, pubic administration, urban studies or other related programs. Students learn analytical techniques and conceptual frameworks for understanding policy issues and identifying potential solutions and applying these skills to real-world issues (especially relating to the needs of cities in the region). Students also gain an understanding of policies addressing issues such as poverty, education, the environment and public safety.

Degree Requirements: 42 credit hours including a Capstone (PAF 509 or PAF 579)
Course work includes 11 required core courses and three elective courses. Students can elect to take either PAF 571 GIS and Analysis or PAF 572 Urban Demography as one of their core courses. The course not used for the core may be used as an elective. Students are required to complete a three-semester hour capstone course which will be an integrative, client-based applied project course. Students take this in their final semester after completion of all other required core courses. This culminating experience is required in place of a thesis.

Admission Requirements: Applications to the M.P.P. program are accepted year-round. Students may be granted admission for fall, spring and summer semesters. Potential applicants who hold a bachelor's degree from a regionally accredited institution in a related field are eligible to apply to the program.
The following entry-level competencies are needed for admission to the program: an undergraduate social statistics course along with undergraduate course work in microeconomics, including coverage of market failure and public goods. Competency in statistics is met with a grade of "B" ( 3.00 on a 4.00 scale) or higher in approved courses (PAF 401, POS 401, PSY 230, QBA 221, SOC 390) within the past two years or passing a diagnostic test approved by the M.P.A./M.P.P. committee. Other courses taken within the last two years may be substituted upon approval of the M.P.A./M.P.P. director.
Competency in microeconomics is met through earning a " $B$ " ( 3.00 on a 4.00 scale) or higher in an undergraduate course in microeconomics, PAF 504 Public Affairs Economics, or a similar course.
All applicants must submit the following materials to the School of Public Affairs:

- Applicants may also submit a resume or other documents.
- Three letters of recommendation; at least two should be faculty who can evaluate applicant's academic performance. There is no form required for the letters of recommendation.
- Written statement of applicant's educational and career goals, and should be between one and two pages in length. This is also used as a sample of the applicant's writing abilities.


## Mail materials to:

ASU School of Public Affairs
Mail Code 3720
411 N. Central Avenue, Ste. 400
Phoenix, AZ 85004-0687

All applicants must submit the following materials to the ASU Graduate College:

- An official online ASU Graduate application.
- Application fee.
- International applicants must also submit acceptable Test of English as a Foreign Language (TOEFL) scores or IELTS scores.
- Official transcripts of all undergraduate and graduate work.
- Scores on the GRE (verbal, quantitative, analytical).

Send transcripts to:
Arizona State University
Graduate College
Interdisciplinary Building, B-Wing, Room 170
P.O. Box 871003

Tempe, AZ 85287-1003

## Contact Information:

Public Programs, College of
School of Public Affairs
http://spa.asu.edu/new/mpp/default.htm
UCENT 400
spa@asu.edu
602-496-0450

## Recreation and Tourism Studies, MS (PPRECDTMS)

Online Degree Search Title: Recreation and Tourism Studies (MS)
Campus: DTPHX

Program Description: The M.S. in recreation and tourism studies is offered by the School of Community Resources and Development. The M.S. program prepares students to analyze and understand critical topics and issues pertinent to the field of recreation, parks, and tourism planning, development and management.
Students choose between two academic options: the thesis or the professional option.

Degree Requirements: 30 credit hours and a Thesis or 36 credit hours and a Master's Research Paper
Completion of the M.S. in recreation and tourism studies on the average requires two years of study. Students may select a thesis or professional option. The thesis option is a research-oriented degree and is recommended for students planning to continue graduate studies beyond the master's degree. The professional option is intended for students seeking additional knowledge and expertise relevant to professional career development. Advising and direction in both options are under the direct supervision of an assigned faculty member.
Program Requirements: Thesis Option
The thesis option consists of a minimum of 30 credit hours, including six hours of thesis (REC 599), which must be defended in an oral examination before a supervisory committee of at least three faculty members, one of whom resides in another department.

REC 500 Research Methods (3)
REC 502 Statistical and Data Analysis (3)
REC 552 Critical Issues in Recreation and Tourism (3)
REC 555 Social Scientific Perspectives in Recreation and Tourism (3)
Advanced inquiry skills (3)
Electives (9)
Thesis (6)

Program Requirements: Professional Option
The professional option consists of 36 credit hours, including six hours of practicum (REC 580). A signed affiliation agreement is required to be on file with the graduate coordinator before registration. The purpose of the 300 -hour practicum is to provide graduate students with in-depth, agency-based professional experiences. The student committee consists of two school faculty members and one community/agency professional. At the end of the practicum, the student is required to submit a written description and analysis of the project and to present the results to the committee.

REC 500 Research Methods (3)
REC 502 Statistical and Data Analysis (3)
REC 530 Recreation and Tourism Service Management (3)
REC 552 Critical Issues in Recreation and Tourism (3)
REC 555 Social Scientific Perspectives in Recreation and Tourism (3)
REC 580 Practicum (6)
Electives (15)

Admission Requirements: Students applying to the M.S. program must have achieved a GPA of 3.00 or the equivalent in the last two years of work leading to the bachelor's degree. Applicants should submit to the Graduate College by March 1 to be considered for fall admission or October 1 for spring admission:

- All undergraduate transcripts.
- An online Graduate College application.
- Application fee.
- A statement of professional and academic goals.
- GRE scores.
- Three letters of recommendation.

Students should submit to the graduate program coordinator by March 1 to be considered for fall admission or October 1 for spring admission:

- A current resume.
- A statement of professional and academic goals.
- Three letters of recommendation.

Only complete application files are reviewed or considered for admission. Students without undergraduate academic work in the recreation/tourism disciplines are required to take six credit hours of deficiency course work in addition to the M.S. requirements. Deficiency course work may be taken in conjunction with M.S. classes.

## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://scrd.asu.edu
UCENT 550
scrd@asu.edu
602-496-0550

## Social Work, PHD (PPSW2PHD)

Online Degree Search Title: Downtown Phoenix - Social Work (PhD)
Campus: DTPHX

Program Description: The purpose of our doctoral program is to prepare future social work scholars. While there are many possible definitions of scholarship, the Arizona State University School of Social Work adheres to a broad definition.
A scholar in social work engages in research, teaching and service. Our program introduces students to the complex range of roles and responsibilities of faculty and other social work roles of leadership. Critical thinking and creativity in research, teaching and service are at the core of our program.
Given the cultural and economic diversity of the Southwest, our program also strives to elaborate the human potential embedded in our region's distinct experiences and perspectives. The university offers opportunities for scholarship integrating diverse cultural experiences such as those offered through specialized programs, including American Indian studies and Chicana and Chicano studies, African and African American studies and Asian Pacific American studies. We hope that our graduates will play key roles in integrating diversity in their social welfare activities with local, state and regional groups.
The program emphasizes enhancement of scholarship through:

- Applied social work research in diverse community settings and populations of the Southwest.
- Participation in collegial decision making.
- Participation in field education and community services.
- Teaching, from syllabus development to classroom teaching across the professional continuum.

Students are expected to participate fully in research teaching, and field liaison activities during their course of studies.
Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation
Our doctoral degree requires that a student take a minimum of 36 course credit hours beyond the M.S.W. and 84 beyond the bachelor's degree. Students may need to take additional course work to achieve the competency requirements set by the program or set by their graduate supervisory committees. Students must also take a minimum of 24 credit hours of dissertation related research (12 hours of SWG 792 and 12 hours of SWG 799).
Residency
Within the first year of matriculation, all students must complete the School of Social Work residency requirement (a minimum of nine credit hours in each semester of consecutive fall/spring or spring/fall semesters excluding summers).

## Foreign Language Requirement

None.
Qualifying Examination
Students are given a qualifying examination in the semester following the completion of the first 18 hours of approved Ph.D. course work. Students who fail the examination may retake it the following semester. Students failing the qualifying examination twice will be dropped from the program.
Comprehensive Examination
Upon completion of course work and the qualifying examination, but before beginning dissertation research, students are given a written examination covering research, theory and methods in their substantive areas. If students should fail one or more components of the examination, a reexamination may be administered no sooner than three months and no later than one year from the date of the original examination. Approval of the reexamination must be obtained from the supervisory committee and dean of graduate studies.
Research and Dissertation Requirements
Each candidate must register for a minimum of 12 hours of research credit and for 12 hours of dissertation credit.
Final Examination
The final oral examination in defense of the dissertation is scheduled and conducted by the student's dissertation committee. A candidate must pass the final examination within five years after completing the comprehensive examination.
The following courses are required:

- Nine hours of directed electives in an identified and chair-approved substantive area of which no more than three of these hours may be used in readings and conference or independent study courses.
- Three hours of theory course in a social science discipline.
- Twelve hours of required 700-level social work courses approved by the doctoral program committee.
- Twelve hours of research methods and statistics courses selected from an approved list provided by the doctoral program committee.

Once the minimum 36 credit hours are completed, students are also required to register for 24 hours of dissertation research credit, SWG 792 before proposal defense and SWG 799 after. Students must be registered for at least one credit hour during the semester (including summer) when they do their dissertation proposal defense. At least one of the dissertation hours must be taken in the semester the student expects to defend his or her dissertation.

Admission Requirements: Admission to the Ph.D. program in the School of Social Work is based on the following criteria:

- An M.S.W. from an accredited school of social work preferably with two or more years of post-M.S.W. employment in human services. Though an M.S.W. is preferred, exceptions may be made for students with a B.S.W. from an accredited school of social work and a master's degree in a related field and for students from countries without accreditation.
- Experience in social work teaching or research and other scholarly activities.
- Experience with diverse populations.
- Goodness-of-fit with program goals.
- Good professional standing.
- Undergraduate and graduate GPA.
- Quality and extensiveness of social work experience.
- Research potential and creativity as demonstrated in requested essays and references.
- Scores of the GRE, with emphasis on verbal and analytic scores.

Admission to the Ph.D. program requires completion of all admission requirement and procedures set forth by the Graduate College. Applications are accepted up to Feb. 1 preceding the fall semester to which the applicant is seeking admission. All Ph.D. program applicants must submit the following to the School of Social Work:

- An application to the Ph.D. program in social work.
- A writing sample/social problem essay.
- Examples of written work (students may submit samples of their professional and/or academic writing).
- Three letters of recommendation on the forms provided by the School of Social Work.

In addition, all applicants must submit the following to the Graduate College:

- A completed online Graduate College application.
- An official transcript of all academic work completed or in progress.
- International students whose native language is not English must satisfy English proficiency requirements.
- The application fee.


## Contact Information:

Public Programs, College of
School of Social Work
http://ssw.asu.edu/
UCENT 800
social.work@asu.edu
602-496-0800

## Social Work, MSW (PPSWDMSW)

Online Degree Search Title: Tucson / Downtown Phoenix - Social Work - Standard Program (MSW)
Campus: DTPHX, WEST

Program Description: The professional program leading to the M.S.W. prepares social workers for advanced direct practice, planning, administration and community practice or advanced generalist practice. The program is designed to prepare social workers to be capable of responding effectively to the needs of special populations in the Southwest. The M.S.W. program is accredited by the Council on Social Work Education.

Degree Requirements: 45 credit hours and a Portfolio or 45 credit hours and a Thesis or 45 credit hours including a Capstone Course (SWG 621) or 60 credit hours and a Portfolio (MSW/MPA dual degree) or 60 credit hours and a Thesis (MSW/MPA dual degree) or 60 credit hours and an Applied Project or 60 credit hours including a Capstone Course (SWG 621) (MSW/MPA dual degree)

Students begin the standard M.S.W. program in the fall and it may be completed within four semesters (full-time) or six semesters (part-time). It is a 45-60 credit hour program, including both classroom and field instruction. It is divided into a foundation year ( 30 credit hours core curriculum) taken by all students and a concentration ( 30 credit hours).
The foundation year includes basic courses in clinical practice, organizational and community change, social policy, human behavior and research.
Students are required to complete two internships, 1) a foundation field placement (480 hours), and 2) a concentration field placement (480 hours) in a different setting.
In the concentration year students select one of the following concentrations, 1) Advanced Direct Practice, and 2) Planning, Administration and Community Practice.
The advanced generalist concentration is not available in Tucson. Some of the required planning, administration and community practice courses are only available at the Downtown Phoenix campus.
Students who select the advanced direct practice concentration also select one of the following three specializations:

- Children, youth and families.
- Health, behavioral health.
- Public child welfare.

All specializations may not be available in Tucson.
Admission Requirements: Applications to the standard M.S.W. program are accepted from Nov. 1 to March 1, or for priority review by Feb. 1, preceding the fall semester to which the applicant is seeking admission. Applicants admitted to the standard M.S.W. program begin classes in the fall.
Applicants for the standard M.S.W. program must submit the following to the School of Social Work:

- A professional resume that includes volunteer and paid work experience.
- A School of Social Work application form.
- A statement of educational and career goals.
- Three letters of reference. A combination of academic and professional references is desirable.

In addition, all applicants must apply to the Graduate College.
Test scores from either the GRE or the Miller Analogies test are required only if the applicant's junior/senior GPA was below a 3.00 (on a 4.00 scale).
The School of Social Work requires one of the following:

- Another undergraduate degree, with 30 credit hours in liberal arts courses at the undergraduate or graduate level.
- A B.S.W. from a Council on Social Work Education (CSWE) accredited school of social work.
- A liberal arts undergraduate degree.

All students are required to successfully complete a course in human biology before enrollment in the graduate program and a course in statistics either by Dec. 31 or before registering for SWG 519.
Part-time Program
Students are admitted each fall to a planned part-time program. Students interested in this option must specifically apply to the part-time program and complete it in accordance with the plan developed to finish the degree in three years.
Transfer Credit
Upon recommendation of the admissions committee, the first year of graduate study (up to 30 graduate credit hours) earned at another CSWE accredited school of social work may be transferred and applied toward the M.S.W. at ASU. Under these circumstances, the student must complete the second full year of graduate study (at least 30 credit hours of graduate work) at ASU. Transfer work must have been completed within two years of the semester and year of admission to the M.S.W. program at ASU with a grade of "B" (3.00) or better.
Exemption and Waiver Examinations
The number of hours required to complete the Standard M.S.W. ranges from 45 to 60 credit hours. In addition to transferring in credit, admitted students may meet requirements of up to 15 hours of credit toward the degree by 1) exempting up to 15 hours of foundation course work without examination, or 2) successfully completing examinations in SWG 501, 502 or 519. Only students from B.S.W. programs accredited by the CSWE can be considered for exemptions.

## Contact Information:

Public Programs, College of
School of Social Work
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## Social Work - Advanced Standing, MSW (PPASWMSW)

Online Degree Search Title: Downtown Phoenix - Social Work - Advanced Generalist (MSW) Campus: DTPHX, WEST

Program Description: The professional program leading to the M.S.W. prepares social workers with the knowledge, skills and values to practice as advanced generalists. The program is designed to prepare social workers to be capable of responding effectively to the needs of special populations in the Southwest. The M.S.W. program is accredited by the Council on Social Work Education, and is located at the Downtown Phoenix campus.

Degree Requirements: 37 credit hours and an Applied Project or 39 credit hours and an Applied Project
Students must start the program in summer (beginning with the first summer session) and complete a total of three credit hours in each summer session, for a total of six hours. The remainder of the program can be completed within two semesters (full time) or four semesters (part time).
Students also complete one internship and an applied project. Summer Session Course WorkD SWG 598 ST:Advanced Standing Bridge Seminar (3)D SWG 598 ST:Advanced Standing Bridge Seminar (3)Advanced Generalist Course WorkSWG 598 Advanced Social Work Practice and Ethics (3)SWG 610 Advanced Generalist SW Practice III (3)SWG 614 Advanced Generalist SW Practice IV (3)SWG 632 Social Policy/Services II (3)SWG 645 Professional Experience III (3)SWG 646 Professional Experience IV (3)SWG 692 Research (3)SWG 693 Applied Project (3)Electives (6) must be from the approved list of electives

Admission Requirements: Applicants must apply to both the School of Social Work and the Graduate College. Advanced standing program applicants must have a B.S.W. from a Council on Social Work Education accredited program with at least a 3.00 GPA (on a 4.00 scale) in the last two years of work leading to the B.S.W. (junior/senior GPA). Applicants must have received B.S.W. no more than six years prior to the date of admission to the M.S.W. program. All applicants are required to have completed a course in human biology and a course in statistics prior to enrollment in the Advanced Standing Program
Applications to the advanced standing program are accepted from Nov. 1 to Jan. 2 preceding the summer session in which the applicant is seeking admission. Applicants admitted to the advanced standing program begin classes in the summer.All advanced standing program applicants must submit the following to the School of Social Work:

- A School of Social Work M.S.W. application form.
- An M.S.W. advanced standing application.
- A statement of educational and career goals.
- A professional resume that includes volunteer and paid work experience.
- Three letters of reference. A combination of academic and professionial references is desirable. References from friends, family members or personal therapists are not accepted. At least one of thre three required references must be from the applicant's B.S.W. field instructor or, if employed in a social work-related job for two or more years, a recommendation from the applicant's supervisor.In addition, all applicants must submit the following to the Graduate College:
- Application for admission to the Graduate College.
- Application fee.
- An official transcript of all academic work completed or in progress.


## Contact Information:

Public Programs, College of
School of Social Work
http://ssw.asu.edu
UCENT 800
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602-496-0800

## Social Work (Advanced Direct Practice), MSW (PPAPDTMSW) <br> Online Degree Search Title: Downtown Phoenix - Social Work - Advanced Direct Practice (MSW) <br> Campus: DTPHX

Program Description: The professional program leading to the M.S.W. program prepares social workers for advanced direct practice. The program is designed to prepare social workers who are capable of responding effectively to the needs of special populations in the Southwest. This program is located at the Downtown Phoenix campus and in Tucson. It is accredited by the Council on Social Work Education.

Degree Requirements: 36 credit hours and a Thesis or 39 credit hours and a Thesis or 39 credit hours including a Capstone Course (SWG 621)
Students must start the program in summer (beginning with the first summer session) and complete a total of three credit hours in each 5 week summer session and three credit hours (1 credit hour Bridge Field Seminar and 2 credit hours of practicum) during the eight-week session, for a total of nine credit hours. The seven credit hours of summer courses are offered in Phoenix only. The summer practicum is available in Tucson. The remainder of the program is completed within two semesters (full time).
Students continue with their practicum during the fall and spring semester and select one of three specializations: children, youth, and families health; behavioral health; or public child welfare. Not all of these specializations may be offered in Tucson. Students must also complete a capstone course.
Summer Session Course Work
D SWG 598 ST: Advanced Standing Bridge Seminar (3)
D SWG 598 ST: Advanced Standing Bridge Seminar (3)
D SWG 598 ST: Bridge Field Seminar (1)
D SWG 580 Practicum (2)
The following specialization courses are required:
Children, Youth and Families
D SWG 606 Assessment of Mental Disorders (3)
D SWG 608 Ecological Approach to Practice with Children, Youth and Families (3)
D SWG 619 Practice-Oriented Research (3)
D SWG 617 Advanced Social Work Practice with Children and Adolescents (3)
D SWG 621 Integrative Seminar
D SWG 641 Advanced Practicum: Direct Practice I (3)
D SWG 642 Advanced Practicum: Direct Practice II (3)
Electives: Nine hours. Two electives must be from an approved list of electives.
Health, Behavioral Health
D SWG 603 Practice in Health/Behavioral Health Settings (3)
D SWG 606 Assessment of Mental Disorders (3)
D SWG 619 Practice-Oriented Research (3)
D SWG 621 Integrative Seminar (3)
D SWG 641 Advanced Practicum: Direct Practice I (3)
D SWG 642 Advanced Practicum: Direct Practice II (3)
Choose one of the following courses:
D SWG 604 Advanced Social Work Practice in Health (3)
D SWG 613 Advanced Social Work Practice in Behavioral Health (3)
Electives: Two electives must be from an approved list of electives (9)
Public Child Welfare
D SWG 606 Assessment of Mental Disorders (3)
D SWG 608 Ecological Approach to Practice with Children, Youth and Families (3)
D SWG 609 Advanced Social Work Practice with Child Welfare Families (3)
D SWG 619 Practice-Oriented Research (3)
D SWG 621 Integrative Seminar (3)
D SWG 633 Child Welfare Services (3)
D SWG 641 Advanced Practicum: Direct Practice I (3)
D SWG 642 Advanced Practicum: Direct Practice II (3)
Electives: which must be approved by the Child Welfare Training Project (6)

Admission Requirements: Applicants must apply to both the School of Social Work and the Graduate College. Advanced Standing Program applicants must have a B.S.W. from a Council on Social Work Education accredited program with at least a 3.00 GPA (on a 4.00 scale) in the last two years of work leading to the B.S.W. (junior/senior GPA). Applicants must have received their B.S.W. no more than six years prior to the date of admission to the M.S.W. program. All applicants are required to have completed a course in human biology and a course in statistics prior to enrollment in the Advanced Standing Program.
Applications to the advanced standing program are accepted from November 1 to January 2 preceding the summer session to which the applicant is seeking admission. Applicants admitted to the advanced standing program begin classes in the summer.
All advanced standing program applicants must submit the following to the School of Social Work:

- An MSW advanced standing application.
- A professional resume that includes volunteer and paid work experience.
- A School of Social Work M.S.W. appplication form.
- A statement of educational and career goals.
- Three letters of reference. A combination of academic and professional refernces is desirable. References from friends, family members or personal therapists are not accepted. At least one of the three required references must be from the applicant's B.S.W. field instructor, or if emloyed in a social work-related job for two or more years, a recommendation from the applicant's supervisor.

In addition, all applicants must submit the following to the Graduate College:

- An official transcript of all academic work completed or in progress.
- Application for admission to the Graduate College.
- Application fee.


## Contact Information:

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School of Social Work
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## Social Work (Planning, Administration and Community Practice), MSW (PPCPDTMSW)

Online Degree Search Title: Downtown Phoenix - Social Work - Adv Standing-Plan, Admin \& Comm Practice (MSW) Campus: DTPHX

Program Description: The professional program leading to the M.S.W. prepares social workers for planning, administration and community practice. The program is designed to prepare social workers to be capable of responding effectively to the needs of special populations in the Southwest. The M.S.W. program is accredited by the Council on Social Work Education, and is located at the Downtown Phoenix campus and in Tucson. Some of the required courses are only available at the Downtown Phoenix campus.

Degree Requirements: 39 credit hours and a Portfolio or 39 credit hours and a Thesis
Students must start the program in summer (beginning with the first summer session) and complete a total of three credit hours in each 5 week summer session and three credit hours (one credit hour Bridge Field Seminar and two credit hours of practicum) during the eight-week session, for a total of nine credit hours. The seven credit hours of summer courses are offered in Phoenix only. The summer practicum is available in Tucson. The remainder of the program is completed within two semesters (full time).
Students continue with their practicum during the fall and spring semester. The culminating experience is a portfolio or thesis. Summer Session Course Work
D SWG 598 ST Advanced Standing Bridge Seminar (3)
D SWG 598 ST Advanced Standing Bridge Seminar (3)
D SWG 598 ST Bridge Field Seminar (1)
D SWG 580 Practicum (2)
Planning, Administration, and Community Practice (PAC)
D SWG 623 Agency and Community-Based Research in Social Work (3)
D SWG 632 Social Policy and Services II (3)
D SWG 643 Advanced Practicum: Planning, Social Work Administration, and Community Practice I (3)
D SWG 644 Advanced Practicum: Planning, Social Work Administration, and Community Practice II (3)
D SWG 681 Social Work Administration (3)
D SWG 682 Community Participation Strategies (3)
D SWG 685 P Program Planning in Social Services (3)
Electives (9)
Electives may be selected from offerings at the School of Social Work or courses offered through other departments with the approval of the M.S.W. program coordinator.

Admission Requirements: Applicants must apply to both the School of Social Work and the Graduate College. Advanced Standing Program applicants must have a B.S.W. from a Council on Social Work Education accredited program with at least a 3.00 GPA (on a 4.00 scale) in the last two years of work leading to the B.S.W. (junior/senior GPA). Applicants must have received their B.S.W. no more than six years prior to the date of admission to the M.S.W. program. All applicants are required to have completed a course in human biology and a course in statistics prior to enrollment in the Advanced Standing Program.
Applications to the advanced standing program are accepted from November 1 to January 2 preceding the summer session to which the applicant is seeking admission. Applicants admitted to the advanced standing program begin classes in the summer.

All advanced standing program applicants must submit the following to the School of Social Work:

- A M.S.W. advanced standing application.
- A School of Social Work M.S.W. application form.
- A statement of educational and career goals.
- A professional resume that includes volunteer and paid work experience.
- Three letters of reference. A combination of academic and professional references is desirable References from friends, family members or personal therapists are not accepted. At least one of the three required references must be from the applicant's B.S.W. field instructor, or if employed in a social work-related job for two or more years, a recommendation from the applicant's supervisor.

In additional, all applicants must submit the following to the Graduate College:

- An official transcript of all academic work completed or in progress.
- Application for admission to the Graduate College.
- Application fee.


## Contact Information:

Public Programs, College of
School of Social Work
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## Trauma and Bereavement (certificate), CERT (HSCTBGRCT)

Online Degree Search Title: Trauma and Bereavement (Grad Certificate)
Campus: DTPHX, WEST

Program Description: There is a growing need in society for health care workers and clinicians to be better prepared to help clients and patients experiencing trauma. The School of Social Work graduate certificate in trauma and bereavement will better prepare individuals to work in the field of death and dying, trauma and bereavement in clinical, organizational and administrative settings, enhancing knowledge about grief responses and the effects of trauma, providing opportunities for students to research an often under-explored topic, and helping transform the sociopolitical management of grief, traumatic losses and end-of-life issues in contemporary society.
In addition to tuition and class fees, there is a $\$ 500$ one-time program fee.

Degree Requirements: 18 credit hours including a Capstone Course (SWG 584/SWG 641/SWG 642/SWG 645/SWG 646/SWG 693)
The certificate requires 1) fifteen credit hours of graduate course work, and 2) Culminating Experience: Research/Applied Project/Internship (3 credit hours).

Admission Requirements: Deadline: April 1 for summer admission; Nov. 1 for spring admission.
All applicants must submit an application and application fee to the Graduate College. In addition the following materials are to be submitted to the School of Social Work.

- A two-to-four page, doubled-spaced, personal statement (guidelines are listed on the application).
- Resume.
- The School of Social Work certificate application. The application is available on the department website.
- Three references, on the forms available on the department Website.
- Transcripts from all institutions granting you an undergraduate or graduate degree.


## Contact Information:

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School of Social Work
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## Sustainability, School of <br> Global Sustainability Leadership (certificate), CERT (SUSUSGGRCT)

Online Degree Search Title: Global Sustainability Leadership (Certificate)
Campus: ONLNE

Program Description: The graduate certificate in global sustainability leadership will provide training to U.S. Army and Army National Guard leaders (e.g., field grade officers, senior civilians, and state environmental program managers) to enhance their ability to instill and manage sustainable practices throughout the Army and Army National Guard. Courses will emphasize providing leadership across lines of operation and areas of responsibility. The program emphasizes the application of sustainability tools, techniques and concepts to issues on bases and installations in the U.S., Europe and Asia and to bases in Iraq, Afghanistan or other areas to which the Army may be deployed.

Degree Requirements: 15 credit hours
Students are expected earn a "B" (3.00) or better in each course. It is also expected that they complete the program in three years, but can finish the program in one or two years depending on how many courses they take each semester.

## Admission Requirements:

- Must be a solider or civilian in the Army or Army National Guard.
- Minimum of a bachelor's degree (or equivalent) or a graduate degree from a regionally accredited college or university.
- Minimum of a 3.00 cumulative GPA ( $4.00=$ "A" scale) in the last 60 hours of a student's bachelor's degree program.
- Resume or curriculum vitae, optional.
- Statement of intent required (details are noted in the application).


## Contact Information:

Sustainability, School of
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http://schoolofsustainability.asu.edu
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480-727-6963

## Sustainability, MA (SUSUSTMA)

Online Degree Search Title: Sustainability (MA)
Campus: TEMPE
Program Description: The M.A. in sustainability is offered for students who have completed a bachelor's degree. The program prepares students to address some of the most pressing concerns of the 21st century. Students learn how different disciplines view and approach the challenges of sustainability in theory, research and practice. They develop the academic and technical skills and the ethical insights that will help them understand, research and provide solutions to complex sustainability challenges at the local, regional, national and global levels. Although the graduate-degree programs emphasize the integration of a broad range of expertise in student training, the M.A. program is best suited to students inclined toward social sciences, humanities, planning or related fields. Students can also apply to participate in the Master's International Peace Corps Program, which works in conjunction with this program.

All sustainability graduate students will possess:

- The ability to communicate their work to professionals in other disciplines, policy-makers and the general public.
- The breadth of vision to recognize the interconnectedness of social, economic and environmental systems.
- The critical thinking skills to approach sustainability challenges from a systems perspective.
- The skills needed to work effectively in interdisciplinary teams.
- The technical skills to formulate and solve problems at the appropriate scale.
- An understanding of the need for an interdisciplinary approach to solving sustainability challenges.

In addition to the common learning outcomes, M.A. students will be able to:

- Apply appropriate metrics and indicators to evaluate the sustainability of environmental institutions, legal frameworks, property rights and culture.
- Lead others in applying these concepts and methods to the development of sustainable institutions for water, land, air and urban management at the local and global level.
- Research particular problems in the sustainability of social institutions.
- Understand the concepts and methods of environmental economics, sociology, anthropology, environmental politics, ethics, design and human geography relevant to the sustainability of environmental resources and social institutions.

Degree Requirements: 33 credit hours and a Portfolio (MIP) or 33 credit hours and a Thesis or 33 credit hours and an Applied Project Each student will formulate a plan of study in consultation with their supervisory committee. The master's programs are divided into the following five areas:

- Applied workshops.
- Core courses.
- Elective courses.
- Problem-focused seminars.
- 5. Required research (for the thesis option) or an applied project (for non-thesis option).
- Students who are also part of the Master's International Peace Corps Program must complete a Peace Corps assignment abroad and it is expected that their thesis/non-thesis topic will be drawn from their experience in the Peace Corps. Students in the program will earn 6 credit hours towards the M.A. program requirements.

The taught-course element of the program will be evaluated through course-specific examinations, research papers and/or applied projects and will be considered to have been successfully completed if the student obtains a GPA of 3.25 or higher. The Graduate College policies and procedures for fulfillment of degree requirements must also be met.

Admission Requirements: The School of Sustainability encourages applicants with diverse educational backgrounds and experience that are relevant to the school's core objectives. In addition to the general requirements for admission to the Graduate College, the School of Sustainability requires:

- A 3.25 GPA in the last 60 credit hours of undergraduate work.
- A statement of intent.
- GRE scores.
- Three letters of recommendation.

The statement of intent should not exceed 600 words and should:

- Explain why the student is applying to the School of Sustainability.
- Outline the student's relevant background information.
- Describe the outcomes expected from the program.
- Identify potential faculty advisors and areas of research/study.
- Elaborate on how the degree will support the student's aspirations and goals.

Although it is not required, applicants are also encouraged to submit a resume or curriculum vitae.
Students interested in applying to participate in the Master's International Peace Corps Program will be able to do so when they apply to the M.A. program.

## Contact Information:

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## Sustainability, MS (SUSUSTMS)

Online Degree Search Title: Sustainability (MS)
Campus: TEMPE
Program Description: The M.S. in sustainability is offered for students who have completed a bachelor's degree. The program prepares students to address some of the most pressing concerns of the 21st century. Students learn how different disciplines view and approach the challenges of sustainability in theory, research and practice. They develop the academic and technical skills as well as the ethical insights that will help them understand, research and provide solutions to complex sustainability challenges at the local, regional, national and global levels. Although the graduate-degree programs emphasize the integration of a broad range of expertise in student training, the M.S. program is best suited to students inclined toward natural sciences, economics or engineering.

Students can also apply to participate in the Master's International Peace Corps Program, which works in conjunction with this program.
All sustainability graduate students will possess:

- An understanding of the need for an interdisciplinary approach to solving sustainability challenges.
- The ability to communicate their work to professionals in other disciplines, policy-makers and the general public.
- The breadth of vision to recognize the interconnectedness of social, economic and environmental systems.
- The critical thinking skills to approach sustainability challenges from a systems perspective.
- The skills needed to work effectively in interdisciplinary teams.
- The technical skills to formulate and solve problems at the appropriate scale.

In addition to the common learning outcomes, M.S. students will be able to:

- Apply appropriate metrics and indicators to evaluate the sustainability of technology, the built environment and their environmental regulations and policy.
- Lead others in applying these concepts and methods to the development of sustainable strategies for water, land, air and urban management at the local and global level.
- Research particular problems in the sustainability of the economic and natural environment.
- Understand the concepts and methods of environmental economics, ecology, environmental biology, hydrology, environmental chemistry, engineering, earth systems management and other disciplines relevant to the sustainable use of environmental resources.

Degree Requirements: 33 credit hours and a Portfolio (MIP) or 33 credit hours and a Thesis or 33 credit hours and an Applied Project Each student will formulate a program of study in consultation with their supervisory committee. The master's programs are divided into the following five areas:

- Applied workshops.
- Core courses.
- Elective courses.
- Problem-focused seminars.
- Required research (for the thesis option)/Applied project (for non-thesis option).

Students who are also part of the Master's International Peace Corps Program must complete a Peace Corps assignment abroad, and it is expected that their thesis/non-thesis topic will be drawn from their experience in the Peace Corps. Students in the program will earn six credit hours towards the M.S. program requirements.
The taught-course element of the program will be evaluated through course-specific examinations, research papers and/or applied projects and will be considered to have been successfully completed if the student obtains a 3.25 or higher. The Graduate College policies and procedures for fulfillment of degree requirements must also be met.

Admission Requirements: The School of Sustainability encourages applicants with diverse educational backgrounds and experience that are relevant to the school's core objectives. In addition to the general requirements for admission to the Graduate College, the School of Sustainability requires:

- A 3.25 GPA in the last 60 credit hours of undergraduate work.
- A statement of intent.
- GRE scores.
- Three letters of recommendation.

The statement of intent should not exceed 600 words and should:

- Describe the outcomes expected from the program.
- Elaborate on how the degree will support the student's aspirations and goals.
- Explain why the student is applying to the School of Sustainability.
- Identify potential faculty advisors and areas of research/study.
- Outline the student's relevant background information.

Although it is not required, applicants are also encouraged to submit a resume or curriculum vitae.
Students interested in applying to participate in the Master's International Peace Corps Program will be able to do so when they apply to the M.S. program.

## Contact Information:

Sustainability, School of
School of Sustainability

## Sustainability, PHD (SUSUSTPHD)

Online Degree Search Title: Sustainability (PhD)
Campus: TEMPE
Program Description: The Ph.D. in sustainability is offered for students who have completed a bachelor's or master's degree. The doctoral program prepares students to become scientists and leaders in research to investigate the urgent sustainability challenges of the 21st century. Ph.D. graduates will possess an advanced understanding of the dynamics of coupled socioecological systems and be able to lead others in research providing adaptive solutions to specific sustainability challenges. The flexible, interdisciplinary nature of the program allows students to focus on problems of interest to them, drawing upon relevant knowledge from a variety of disciplines.
All sustainability graduate students will possess:

- An understanding of the need for an interdisciplinary approach to solving sustainability challenges.
- The ability to communicate their work to professionals in other disciplines, policy-makers and the general public.
- The breadth of vision to recognize the interconnectedness of social, economic and environmental systems.
- The critical thinking skills to approach sustainability challenges from a systems perspective.
- The skills needed to work effectively in interdisciplinary teams.
- The technical skills to formulate and solve problems at the appropriate scale.

In addition to the common learning outcomes, Ph.D. students will be able to:

- Conduct research on particular sustainability challenges using standard skills, including the capacity to identify problems; formulate and test hypotheses; use statistical, econometric and geographical-information-system techniques to construct and analyze datasets; and build and apply models.
- Lead others in the analysis and design of the built environment and institutions' policies, regulations and technologies to support sustainable development.
- Lead others in applying these concepts and methods to the development of sustainable strategies for water, land, air and urban management at the local and global level.
- Understand the concepts and methods of a number of critical disciplines bearing on the sustainability of systems at different spatial/temporal scales.

Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation
Students may be admitted to the program with a bachelor's or master's degree from relevant fields. The degree requirement is 84 credit hours of work beyond the bachelor's level. Up to 30 credit hours from a previously awarded master's degree in a related field can be accepted toward the fulfillment of the Ph.D. requirements. Each student formulates a program of study in consultation with his or her supervisory committee. The doctoral program is divided into the following five areas:

- Applied workshops.
- Core courses.
- Elective courses.
- Problem-focused seminars.
- Required research.

Each program of study must include 24 credit hours of a combination of research and dissertation. The taught-course element of the program will be evaluated through course-specific examinations, research papers and/or applied projects and will be considered to have been successfully completed if the student obtains a GPA of 3.25 or higher. Graduate College policies and procedures for fulfillment of degree requirements must also be met.

Admission Requirements: The School of Sustainability encourages applicants with diverse educational backgrounds and experience that are relevant to the school's core objectives. Applicants are strongly encouraged to contact potential faculty mentors prior to filling out the application to make sure their area of interest is represented well. In addition to the general requirements for admission to the Graduate College, the School of Sustainability requires:

- A 3.25 GPA in the last 60 credit hours of undergraduate work.
- A statement of intent.
- GRE scores.
- Three letters of recommendation.

The statement of intent should not exceed 600 words and should:

- Describe the outcomes expected from the program.
- Elaborate on how the degree will support the student's aspirations and goals.
- Explain why the student is applying to the School of Sustainability.
- Identify potential faculty advisors and areas of research/study.
- Outline the student's relevant background information.

Although it is not required, applicants are also encouraged to submit a resume or curriculum vitae.

## Contact Information:

Sustainability, School of
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## Teachers College, Mary Lou Fulton

An Overview of Autism Spectrum Disorders (certificate), CERT (EDSPEGRCA)
Online Degree Search Title: An Overview of Autism Spectrum Disorders (Grad Certificate)
Campus: ONLNE, TEMPE
Program Description: The program prepares participants with the latest information and practical techniques to understand and serve those with Autism Spectrum Disorders (ASD). This 15-credit hour program is offered online only. The ASD certificate consists of four classes and a practicum. The practicum provides an opportunity to use new knowledge and skills in a real world setting consistent with the student's interests and abilities.
The ASD graduate certificate is designed for individuals who:

- Are committed to providing services to children, youth and adults who fall under the ASD umbrella.
- Are interested in a graduate certificate in ASD, and are also pursuing a formal graduate program.
- Are interested in a graduate certificate in ASD, but not in pursuing a formal graduate program.
- Hold a bachelor's degree or higher.
- Meet ASU graduate admissions criteria.

Degree Requirements: 15 credit hours
SPE 521 Introduction to Autism Spectrum Disorders (3), offered spring and summer
SPE 531 Behavior Management Approaches (3), offered fall
SPE 577 Inclusive Teaching and Learning (3), offered spring
SPE 580 Practicum (3), offered summer and fall
SPE 598 Reading and Communication Strategies for Individuals with Autism and Related Disorders (3), offered fall

Admission Requirements: All applicants must submit the Graduate College online application and meet all Graduate College admission requirements.

## Contact Information:

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Dean, Mary Lou Fulton Teachers College
http://education.asu.edu/
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602-543-6357
Curriculum and Instruction (Accomplished Teaching), MA (EDACCTCMA)
Online Degree Search Title: Curr \& Inst (Accomplished Teaching) MA
Campus: TEMPE

Program Description: The concentration provides a focused body of course work and experiential opportunities aligned with personalized professional needs, interests and requirements for advancing within the teaching profession, including an option for participation in the National Board Teacher certification process. It also includes experience in the development of professional learning communities, inquiry and applied experiences designed to increase advanced professional knowledge, research and practice. The concentration enhances a developmental trajectory within a teacher's professional growth on a continuum toward accomplished teaching and teacher leadership. A teacher completing this degree will have a foundation in teaching and leadership, and a choice of a customized concentration in, or a broader knowledge base across, varying disciplines related to education. This choice is deliberate and inherent in this concentration. The ultimate outcome is a highly competent and qualified teacher leader who has the knowledge and advanced skills to make a positive impact in the educational communities in which they serve. This program espouses the principles and concepts of the National Board Certification process and is appropriate for teachers who wish to seek such certification.

Degree Requirements: 30 credit hours including the required course (DCI 593) and an Applied Project
Courses for this program are divided as follows:
Required Courses (9)
EDA 534 Learned Centered Leadership
DCI 611 Introduction to Professional Learning
DCI 610 Introduction to Accomplished Teaching
Elective Courses
Thesis Option (12)
Non- thesis option (15)
Research/Action Course (3)
DCI 510 or DCI 591 or COE 501
Culminating Experience
Thesis option: thesis (6)
Non-thesis option: applied project (3)
Admission Requirements: All applicants must meet Graduate College admission standards and submit the Graduate College online application.
Potential applicants who hold a bachelor's degree from a regionally accredited institution in a related field are eligible to apply to the program. Ideally, applicants will be teachers; however, people working in educational settings other than K-12 schools may apply to this program as well.

## Contact Information:

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## Curriculum and Instruction (Early Childhood Education), MEd (TEECDMED)

Online Degree Search Title: Early Childhood Education - Certification/Endorsement (MED)
Campus: ONLNE, WEST

Program Description: The masters degree in early childhood education offers both aspiring and practicing early childhood educators multiple options as they pursue their studies. In addition to the M.Ed., students with current teacher certification may choose to simultaneously earn the early childhood endorsement to their Arizona elementary education certificate. Students who are not certified teachers may earn Arizona early childhood certification. This is an online program, however, the geographic area for practicum placements will be determined by the campus selected during the admission process. For more information on the concentration, program and college, consult the college website.

Degree Requirements: 30 credit hours including the required course (ECD 593) and an Applied Project Students in this program will complete an applied project within their plan of study as a culminating activity.

Admission Requirements: Applicants must apply to the ASU Graduate College and to the specific program and specialization to which they seek admission (endorsement or certification). Admission to a degree program is based on undergraduate and/or graduate GPAs.

## Contact Information:

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## Curriculum and Instruction (English as a Second Language), MA (EDESLMA)

Online Degree Search Title: English as a Second Language - Tempe Campus (MA)
Campus: ONLNE, TEMPE
Program Description: The M.A. in curriculum and instruction offers students opportunities to develop expertise in contemporary issues and pedagogical and research methods related to curriculum and instruction. Students also investigate applied and theoretical issues in their area of concentration. This degree may be designed as either a terminal degree or as preparation for doctoral work.
The M.A. in curriculum and instruction with a concentration in English as a second language is designed to provide course work related to teaching school-aged English learners in U.S. settings (second language acquisition theory, English learner programs and methods and language assessment) along with course work in research methods to be used in the design and implementation of the culminating project.
Note: This degree is not the same as the Master of Teaching English to Speakers of Other Languages (MTESOL) offered through the English department.

Degree Requirements: 30 credit hours and a Portfolio or 30 credit hours and a Thesis or 30 credit hours and a Written Comprehensive Exam or 30 credit hours including the required course (DCI 593) and an Applied Project
Each candidate will also complete a culminating project under the direction of his or her advisor. Curriculum and Instruction M.A. students are assigned a faculty advisor at the time of their admission. For students completing a thesis as their culminating project, the advisor will assist in selecting the graduate committee and serve as the chair. The graduate program committee must be formed prior to the student completing 12 hours of credit in the program.

Admission Requirements: The following are required:

- Application to the Graduate College (online at graduate.asu.edu).
- Curriculum vitae (resume).
- Letter of intent/statement of purpose.
- Three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate program.
- Transcripts.

Additional materials may be required to gain admission into certain programs or cohorts.

## Contact Information:

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## Curriculum and Instruction (Language and Literacy), MA (EDLANGMA)

Online Degree Search Title: Curr \& Inst (Language and Literacy) (MA)
Campus: TEMPE
Program Description: The M.A. in curriculum and instruction offers students opportunities to develop expertise in contemporary issues and pedagogical and research methods related to curriculum and instruction. Students also investigate applied and
theoretical issues in their area of concentration. This degree may be designed as either a terminal degree or as preparation for doctoral work in curriculum and instruction.
The M.A. in curriculum and instruction with a concentration in language and literacy offers students opportunities to develop expertise in contemporary issues and pedagogical methods related to language and literacy, teaching and research, such as children's literature, content literacy, digital literacy and gender. Students in this degree may choose a paths that lead to:

- Arizona reading endorsement.
- General language and literaure theory and practice.
- Specialization in ESL/BLE.

Degree Requirements: 30 credit hours and a Written Comprehensive Exam
Each candidate will also complete a culminating project under the direction of his or her advisor. Curriculum and instruction M.A. students are assigned a faculty advisor at the time of their admission. For students completing a thesis as their culminating project, the advisor will assist in selecting the graduate committee and serve as the chair. The graduate program committee must be formed prior to the student completing 12 hours of credit in the program.

Admission Requirements: The following are required:

- Application to the Graduate College through the online application.
- Curriculum vitae (resume).
- Letter of intent/statement of purpose.
- Three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate program.
- Transcripts.

Additional materials may be required to gain admission into certain programs or cohorts.

## Contact Information:

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## Curriculum and Instruction (Mathematics Education), MA (EDMATHMA)

Online Degree Search Title: Mathematics Education (MA)
Campus: TEMPE

Program Description: The M.A. in curriculum and instruction offers students opportunities to develop expertise in contemporary issues and pedagogical and research methods related to curriculum and instruction. Students also investigate applied and theoretical issues in their area of concentration. This degree may be designed as either a terminal degree or as preparation for doctoral work in curriculum and instruction.
The M.A. in curriculum and instruction with a concentration in mathematics education is a research degree program designed to facilitate development of advanced-level professional knowledge, skills and understanding. This program is designed to cultivate an understanding of mathematics education. Students in this program participate in core mathematics education courses, and then have the opportunity to examine one aspect of mathematics education in depth.

Degree Requirements: 30 credit hours and a Thesis or 30 credit hours and a Written Comprehensive Exam or 30 credit hours including the required course ( DCI 593 ) and an Applied Project

Each candidate will also complete a culminating project under the direction of his or her advisor. Curriculum and instruction M.A. students are assigned a faculty advisor at the time of their admission. For students completing a thesis as their culminating project, the advisor will assist in selecting the graduate committee and serve as the chair. The graduate program committee must be formed prior to the student completing 12 hours of credit in the program.

Admission Requirements: The following are required:

- Application to the Graduate College.
- Curriculum vitae (resume).
- Letter of intent/statement of purpose.
- Three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate program.
- Transcripts.

Additional materials may be required to gain admission into certain programs or cohorts.

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## Curriculum and Instruction (Teaching and Learning), MEd (EDDCIMED)

Online Degree Search Title: Teaching and Learning (MED)
Campus: ONLNE, TEMPE
Program Description: The M.Ed. in curriculum and instruction offers a concentration in accomplished teaching for practitioners across all disciplines and grades. This concentration provides coursework and experiential opportunities aligned with personalized professional needs, interests and requirements for advancing within the teaching profession, including an option for participation in the National Board Teacher certification process. It also includes experience in the development of professional learning communities, engagement in scholarship, inquiry and applied experiences designed to indrease advanced professional knowledge, research and practices. The concentration in accomplished teaching addresses a developmental process within a teacher's professional growth on a continuum toward accomplished teaching and teacher leadership. A teacher completing this degree will have a foundation in teaching and leadership, and a choice of a customized concentration in or a broader knowledge base across varying disciplines related to education. The ultimate outcome is a highly competent and qualified teacher and leader in education who has the knowledge and skills to make a positive difference in the lives of the eduational communities in which they serve.

Degree Requirements: 30 credit hours and a Written Comprehensive Exam or 30 credit hours including the required course (SPE 580) and a Portfolio or 30 credit hours including the required course (SPE 593) and an Applied Project

Each candidate will also complete a culminating project under the direction of his or her advisor. Students are assigned a faculty advisor at the time of their admission.

Admission Requirements: The following are required:

- Application to the Graduate College.
- Transcripts.
- Letter of intent/statement of purpose.
- Curriculum vitae (resume).
- Three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate program.Additional materials may be required to gain admission into certain programs or cohorts.


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## Educational Administration and Supervision, MEd (EDSUPVMED)

Online Degree Search Title: Educational Administration \& Supervision (MEd)
Campus: DTPHX, POLY, TEMPE, WEST

Program Description: The M.Ed. in educational administration and supervision with a concentration in principalship is designed to lead towards the Arizona Principal Certificate Pre-kindergarten to grade 12. The program is based on the Interstate School Leaders Licensure Consortium standards. Students completing the program (including the internship) providing evidence of meeting state SEI
requirementsm and evidence of three years of K-12 teaching experience may obtain an Institutional Recommendation to expedite their Arizona certification as principals. This program is offered in multiple delivery modes.

Degree Requirements: 30 credit hours including a Capstone Course (EDA 691)
Students in the M.Ed. in educational administration and supervision program complete:

- A portfolio demonstrating mastery of program standards.
- Concentration requirements. (21)
- Core requirements. (9)

Admission Requirements: All requirements of the ASU Graduate College.

- All applicants must submit the Graduate College online application.
- Resume (upload through online admissions application).
- Three professional references(provide e-mail addresses through online application).
- Two-page personal statement describing professional goals (upload through online admissions application).

In most classes, students work with a school principal in order to provide for the application of knowledge in real world settings. Preference is given to applicants who obtain one of their professional reference recommendations from their current principals as an indication of the supervisor's judgment as to the candidate's potential as an administrator. GRE scores are not required for admission.
GRE scores are not required. Preference is given to applicants with P-12 teaching experience; however, applicants must have completed the state required SEI hours before applying.

## Contact Information:

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## Educational Administration and Supervision (Principalship), MEd (TEPRINMED)

Online Degree Search Title: Educ Administration \& Supervision - Principalship (MEd)
Campus: ONLNE, WEST
Program Description: The M.Ed. in educational administration and supervision with a concentration in principalship is designed to lead towards the Arizona Principal Certificate Pre-kindergarten to grade 12. The program is based on the Interstate School Leaders Licensure Consortium standards. Students completing the program (including the internship) providing evidence of meeting state SEI requirements, and evidence of three years of K-12 teaching experience may obtain an Institutional Recommendation to expedite their Arizona certification as principals. This program is offered in multiple delivery modes.

Degree Requirements: 36 credit hours and a Portfolio
Students in the M.Ed. in educational administration and supervision program complete:

- A portfolio demonstrating mastery of program standards.
- Concentration requirements. (21)
- Core requirements. (9)
- Program requirements. (6)


## Admission Requirements:

- All applicants must submit the Graduate College online application.
- All requirements of the ASU Graduate College.
- Resume (upload through online admissions application).
- Three professional references (provide e-mail addresses through online application).
- Two-page personal statement describing professional goals (upload through online admissions application.

In most classes, students work with a school principal in order to provide for the application of knowledge in real world settings. Preference is given to applicants who obtain one of their professional reference recommendations from their current principals as an indication of the supervisor's judgment as to the candidate's potential as an administrator. GRE scores are not required for admission.

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## Educational Administration and Supervision (Supervision), MEd (TESPRVIMED)

Online Degree Search Title: Educ Administration \& Supervision - Supervision (MEd)
Campus: ONLNE, TEMPE, WEST

Program Description: This degree in intended for teacher leaders desiring Arizona state certification for supervisory positions. For teachers who want to learn leadership skills and work with other teacheres on improving instruction, but do not necessarily want to become a principal. This concentration leads to Arizona Supervisor Certification.

Degree Requirements: 36 credit hours and a Portfolio

- All requirements of the ASU Graduate College
- Three letters from professional references.
- Resume.
- Two-page personal statement describing professional goals.In most classes, students work with a school principal (or in the superintendency program, a superintendent) in order to provide for the application of knowledge in real world settings. It is wise to obtain one of your recommendations from the principal you plan to work with to demonstrate your supervisor's judgment as to your potential as an administrator. GRE scores are not required for admission.


## Admission Requirements:

- All requirements of the ASU Graduate College
- Three letters from professional references.
- Resume.
- Two-page personal statement describing professional goals.In most classes, students work with a school principal (or in the superintendency program, a superintendent) in order to provide for the application of knowledge in real world settings. It is wise to obtain one of your recommendations from the principal you plan to work with to demonstrate your supervisor's judgment as to your potential as an administrator. GRE scores are not required for admission.


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## Educational Leadership and Policy Studies, PHD (EDLDRSHPHD)

Online Degree Search Title: Educational Leadership/Policy Studies (PhD) Campus: TEMPE

Program Description: The Ph.D. in Educational Leadership and Policy Studies emphasizes methods of education policy analysis and provides for specializations in seven related disciplines and topics. Researchers engaged in education policy studies analyze the processes by which societies formulate, implement, evaluate, and modify their education systems. Doctoral students receive coursework and practical experiences in a variety of contexts, including higher education, elementary and secondary schools, and education governing bodies.
Areas of specialization include:

- American Indian education policy.
- Anthropology and education.
- Higher education.
- International and comparative education.
- Language policy.
- Policy analysis.
- Social and philosophical foundations.

The faculty seeks to train scholars who will teach and conduct research on education policy in a variety of settings, including:

- Government agencies.
- Non-governmental organizations.
- Research centers.
- Schools.
- Universities.

Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation
The Ph.D. in educational leadership and policy studies requires 84 credit hours, of these 54 must be earned at ASU and 24 of the ASU hours must be earned in research or dissertation.

Students entering the Ph.D. program with a master's degree in a related discipline may count up to 30 credit hours from the master's degree toward the 84 credits. In addition, a student may use up to 12 additional credit hours toward the Ph.D. if documentation is provided showing that those credit hours were not part of the master's degree. Students without a master's degree in a related discipline may transfer no more than 12 credit hours toward the degree.

## Admission Requirements:

- Online application through the Graduate College.
- The applicant's research and career goals and the work and academic experiences outlined in her/his personal statement and curriculum vitae or resume (uploaded to online application).
- The applicant's scores on the GRE.
- The applicant's undergraduate and graduate coursework and grades.
- The availability of faculty to supervise the applicant in her/his academic area of interest.
- Three letters of recommendation (submit email addresses of references in the online application).


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## Educational Technology, MEd (EDTECHMED)

Online Degree Search Title: Educational Technology (MEd)
Campus: TEMPE

Program Description: The educational technology master's program has a strong focus on design, development and evaluation of educational technology applications to support learning. The program meets the needs of two groups of potential applicants: teachers and instructional designers.
Graduates of the program typically are employed in schools, community colleges and universities, or as training specialists in corporate settings.

Degree Requirements: 30 credit hours including the required course (EDT 593) and an Applied Project Each student develops a plan of study in consultation with a faculty advisor.
Required Courses (18)

- Design and development of instruction.
- Development of computer-based instruction.
- Foundations and issues in educational technology.
- Instructional media design.
- Internship (or practicum).
- Theoretical views of learning.

Elective courses selected from a variety of specialty areas (12)

- Distance education.
- Instructional design.
- Media development.
- Performance improvement and training.
- Technology integration.
- Various technologies.

Admission Requirements: All applicants must submit the Graduate College online application. Academic requirements for admission to the EDT master's program include:

- A four-year undergraduate GPA of 3.00 or above.
- A resume.
- A score of either 500 or above on the GRE verbal section or a scaled score of 400 or above on the Miller Analogies Test (MAT).
- A score of 550 (paper-based) or 213 (computer-based) or 80 (Internet-based) or above on the Test of English as a Foreign Language (TOEFL) for students who do not speak English as their first language.
- A statement of professional goals.
- Two professional references.


## Contact Information:

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## Educational Technology, PHD (EDTECHPHD)

Online Degree Search Title: Educational Technology (PhD)
Campus: TEMPE
Program Description: The focus of the Ph.D. program in educational technology is on the design, development and evaluation of instructional systems and on educational technology applications to support learning. The doctoral program emphasizes research using educational technology in applied settings.
The Ph.D. in educational technology prepares students for a variety of professional positions. Graduates are typically employed as university faculty, educational technologists in universities, community colleges and schools or as training managers in corporate settings.

Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation
The following 48 credit hours of course work is required for all students in the educational technology doctoral program:

- Advanced educational technology research.
- Advanced instructional development.
- Design and development of instruction.
- Development of computer-based instruction.
- Dissertation.
- Educational evaluation.
- Foundations and issues in educational technology.
- Instructional media design.
- Internship (or practicum).
- Introduction to data analysis.
- Multiple regression/correlation.
- Research in educational technology.
- Theoretical views of learning.

One year full-time in residency, a research publication and a written comprehensive examination and successful defense of the dissertation are required.
Electives: 36 credit hours minimum.

Admission Requirements: Applicants must submit an online Graduate College application, transcripts and GRE results. The online applications provides for uploading of required documents.
Academic requirements for admission to the educational technology doctoral program include:

- A four-year undergraduate GPA of 3.20 or above.
- A resume.
- Scores of 500 or above on both the verbal reasoning and quantitative reasoning sections of the GRE.
- A score of 4 or above on the analytical writing section of the GRE.
- A score of 600 (paper-based) or above on the Test of English as a Foreign Language (TOEFL) or 100 (Internet-based) is also required for students who do not speak English as their first language.
- A statement of professional goals.
- Two professional references.


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## Elementary Education, MEd (TEELEMMED)

Online Degree Search Title: Elementary Education (General) (MEd)
Campus: ONLNE, WEST
Program Description: The master's degree in elementary education with a general specialization is designed to assist practicing teachers acquire the knowledge base and skills necessary to develop and provide the most current instructional methods and materials for their students. The program emphasizes practical classroom applications are based on the latest theory, research and best current practice. A general program is designed with the assistance of a faculty advisor to meet the needs of a student's professional and career goals.

Degree Requirements: 33 credit hours and a Written Comprehensive Exam
Students must complete a total of 33 credit hours including a comprehensive examination, which completes the program.
Admission Requirements: Applicants must apply to the ASU Graduate College and to the specific program and concentration to which they seek admission. Admission to a degree program is based on:

- The availability of faculty to supervise academic areas of interest.
- Letters of recommendation.
- Personal statement.
- Undergraduate and/or graduate GPAs.
- Work and academic experience.

Applicants to the elementary or secondary programs must hold valid Arizona teaching certificates for those grade levels unless they are pursuing an M.Ed. with certification OR have two years of teaching experience.

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## Elementary Education (Educational Technology), MEd (TEEDTECMED) <br> Online Degree Search Title: Elementary Ed (Ed Technology) (MED) <br> Campus: ONLNE, WEST

Program Description: The master's degree in elementary education with a specialization in educational technology is designed to assist practicing teachers acquire the knowledge base and skills necessary to develop and provide the most current instructional
methods and materials for their students. The emphasis of the program is on practical classroom applications that are based on the latest theory, research and best current practice. Some classes are delivered online.

Degree Requirements: 33 credit hours and a Portfolio
Students must complete a total of 33 credit hours, including 21 credits in their concentration and an applied project which completes the program.

Admission Requirements: Applicants must apply to the ASU Graduate College and to the specific program and concentration to which they seek admission. Admission to a degree program is based on:

- The availability of faculty to supervise academic areas of interest.
- Letters of recommendation.
- Personal statement.
- Undergraduate and/or graduate GPAs.
- Work and academic experience.

Applicants to the elementary or secondary programs must hold valid Arizona teaching certificates for those grade levels unless they are pursuing an M.Ed. with certification OR have two years of teaching experience.

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## Elementary Education (Reading), MEd (TERDGMED)

Online Degree Search Title: Elementary Ed (Reading) (MEd)
Campus: WEST
Program Description: The master's degree in elementary education with a specialization in reading is designed to assist practicing teachers acquire the knowledge base and skills necessary to develop and provide the most current instructional methods and materials for their students and to serve as literacy resources for other teachers. The emphasis of the program is on practical classroom applications that are based on the latest theory, research and best current practice. The program leads toward an Arizona state endorsement as a reading specialist.

Degree Requirements: 33 credit hours and a Written Comprehensive Exam
Students must complete a total of 33 credit hours, including 21 credits in their concentration and a culminating experience in the form of a portfolio.

Admission Requirements: Applicants must apply to the ASU Graduate College and to the specific program and concentration to which they seek admission. Admission to a degree program is based on:

- The availability of faculty to supervise academic areas of interest.
- Letters of recommendation.
- Personal statement.
- Undergraduate and/or graduate GPAs.
- Work and academic experience.

Applicants to the elementary or secondary programs must hold valid Arizona teaching certificates for those grade levels unless they are pursuing an M.Ed. with certification OR have two years of teaching experience.

## Contact Information:

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## Elementary Education (Teacher Certification Accelerated), MEd (TEEEACLMED)

Online Degree Search Title: Elementary Education (Teacher Certification Accelerated) (MEd) Campus: DTPHX, POLY, TEMPE, WEST

Program Description: The master's degree in elementary education with teacher certification is appropriate for those who hold a bachelor's degree and who wish to become certified in Arizona and earn a master's degree at the same time. The certification concentration offers three tracks, providing three different delivery options:

- The master's and certification (MAC) with evening classes for two semesters plus one summer semester and a semester of student teaching.
- The intern master's and certification (INMAC) for those holding Arizona Intern teaching certificates and employed as teacher of record by a school district, charter or private school.
- Teacher residency track, an intensive immersion program offered with selected school district partners.

Degree Requirements: 33 credit hours including the required course (EED 593) and an Applied Project
Students in this program will complete an applied project as part of their plan of study. The applied project is conducted in the student teaching or Apprentice Teaching school setting.

Admission Requirements: Applicants must apply to the ASU Graduate College through the online application. Official transcripts are required. Note: Field experiences begin the first semester in the program and require a fingerprint clearance card. Applicants are advised to seek fingerprint clearance as soon as possible as the process may take some time.

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## Higher and Postsecondary Education, MEd (EDPOSTMED)

## Online Degree Search Title: Higher and Postsecondary Education (MEd)

Campus: TEMPE

Program Description: The M.Ed. in higher and postsecondary education is a relevant and applied program designed to shape scholars and leaders with knowledge and skills paralleling the trajectory of the New American University. The program's graduates are prepared to advance student and institutional success across every area of the undergraduate learning experience. Highlights of the program include that it:

- Collaborates with university learning partners to fund graduate students through management internship opportunities.
- Culminates with an applied project (nonthesis) that demonstrates the student's learning and development for in job applications, professional growth and lifelong learning.
- Includes a variety of course delivery formats for students, which expedites degree attainment.
- Offers courses that integrate theory to practice through relevant research, models and applied skills.
- Offers creative practicum experience to advance skills and professional development.
- Offers the graduate student success seminar at the beginning of the program and features M.Ed. peer instructors to help build relationships, create a professional e-portfolio and to develop skills for student success.

Degree Requirements: 30 credit hours and an Applied Project
Students will meet with the M.Ed. coordinator during their first semester of enrollment and the beginning of their third semester, to develop their program of study, review their student portfolio, outline their practicum and prepare for the applied project and graduation. All of the program of study requirements for the M.Ed. in the higher and postsecondary education program must be completed within a period of six years.

Admission Requirements: For admission to the M.Ed. program, the Higher and Postsecondary Education Program offers rolling admissions and requires the following criteria from applicants:

- A GPA of at least 3.00.
- GRE scores not required.
- Letter of intent and resume uploaded to online application.
- Online application, application fee and official undergraduate transcripts to the Graduate College.

Note: This program is at maximum enrollment capacity and is not accepting new applications.

## Contact Information:

Teachers College, Mary Lou Fulton
Dean, Mary Lou Fulton Teachers College
http://eduction.asu.edu
ED 120
educationadvising@asu.edu
602-543-6358

## Instructional Design and Performance Improvement (certificate), CERT (EDEDTGRCT)

Online Degree Search Title: Instructional Design and Performance Improvement (Graduate Certificate)
Campus: TEMPE
Program Description: The graduate certificate in educational technology focuses on how to faciliate learning and performance in a variety of settings. The program can be completed along with a graduate degree or as a stand-alone certificate.

Degree Requirements: 15 credit hours including a Capstone (EDT 504)
Students must successfully complete three core courses, one elective course and one capstone course to complete the certificate. In terms of core courses, students are required to complete the courses listed below.

Core Courses (three required)
EDT 501 Foundations and Issues in Educational Technology
EDT 502 Design and Development of Instruction
EDT 503 Instructional Media Design
EDT 504 Development of Computer-Based Instruction (capstone course)
Students must complete one elective course chosen with their faculty advisor .
Admission Requirements: The graduate certificate in educational technology is available to all ASU graduate students and to nondegree graduate students provided they meet eligibility criteria. To be eligible for this program, the applicant must 1) hold a bachelor's degree or equivalent from a regionally accredited institution, and 2) have a cumulative junior/senior undergraduate GPA of 3.00 or higher.
All applicants must submit an online application through the ASU Graduate College. All materials listed below must be submitted to graduate admissions:

- All applicants must submit the Graduate College online application.
- One official copy of all college or university transcripts.
- Online application.
- Resume or curriculum vitae.


## Contact Information:

Teachers College, Mary Lou Fulton
Dean, Mary Lou Fulton Teachers College
http://education.asu.edu
ED 120
educationadvising@asu.edu
480-965-4602

Leadership and Innovation (Policy and Administration), EdD (TEINNPAEDD)
Online Degree Search Title: Educational Ldrship and Innovation - Policy/Admin (EdD)
Campus: WEST
Program Description: The Ed.D. in leadership and innovation is open to students who have a master's degree in education or a closely related field. It is a cohort program designed to equip educational leaders, innovators and scholars with deep understanding, dispositions and skills to lead change and examine its impacts in the workplace. Key features of this program are:

- Core courses paired and team taught by two faculty members.
- Leader Scholar Communities of five to seven students along with two faculty members meet regularly and support each student through the dissertation process.
- Multiple cycles of research to prepare students for the dissertation.
- Students immersed in action research in their own local school sites or other workplaces.

Degree Requirements: 90 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation (including a Master's degree and 60 credit hours post-Masters)

- Comprehensive examination.
- Dissertation (12).
- Electives (18).
- Participation in leader scholar communities (directed field-based studies) (9).
- Professional core (12).
- Research core (9).


## Admission Requirements:

- All applicants must submit the Graduate College online application.
- All requirements of the ASU Graduate College.
- A current resume.
- A master's degree in education or a related field from a regionally accredited institution.
- A personal statement describing academic and professional goals.
- A sample of professional or academic writing such as an assignment from a graduate class (a case study, literature review, or other piece of writing that indicates the ability to write in an academic setting.
- Three professional references (provide e-mail addresses).


## Contact Information:

Teachers College, Mary Lou Fulton
Educational Leadership \& Innovation, Division
http://education.asu.edu/programs/leadership-and-innovation
FAB S236
educationadvising@asu.edu
602-543-6358

## Leadership and Innovation (Teaching), EdD (TEINNTEEDD)

Online Degree Search Title: Educational Ldrship and Innovation - Teaching (EdD)
Campus: WEST
Program Description: The Ed.D. in leadership and innovation is open to students who have a master's degree in education or a closely related field. It is a cohort program designed to equip educational leaders, innovators and scholars with deep understanding, dispositions and skills to lead change and examine its impacts in the workplace. Key features of this program are:

- Core courses paired and team taught by two faculty members.
- Leader Scholar Communities of five to seven students along with two faculty members meet regularly and support each student through the dissertation process.
- Multiple cycles of research to prepare students for the dissertation.
- Students immersed in action research in their own local school sites or other workplaces.

Degree Requirements: 90 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation (including a Master's degree and 60 credit hours post-Masters)

- Comprehensive examination (12).
- Dissertation.
- Electives (18).
- Participation in leader scholar communities (directed field-based studies) (9).
- Professional core (12).
- Research core (9).

Admission Requirements: All requirements of the ASU Graduate College.

- All applicants must submit the Graduate College online application.
- A current resume.
- A master's degree in education or a related field from a regionally accredited institution.
- A personal statement describing academic and professional goals.
- All requirements of the ASU Graduate College.
- A sample of professional or academic writing such as an assignment from a graduate class (a case study, literature review, or other piece of writing that indicates the ability to write in an academic setting).
- Three professional references (provide e-mail addresses).


## Contact Information:

Teachers College, Mary Lou Fulton
Educational Leadership \& Innovation, Division
http://education.asu.edu/programs/leadership-and-innovation
FAB S236
educationadvising@asu.edu
602-543-6358

## Online Teaching for Grades K-12 (certificate), CERT (TEEDTGRCT)

Online Degree Search Title: Online Teaching for Grades K-12 (Grad Certificate)
Campus: ONLNE

Program Description: The online teaching for grades K-12 graduate certificate consists of online courses centered on preparing K-12 educators for online teaching along three major domains, which include technological, pedagogical and content-related areas. The goal of this program is to prepare current K-12 teachers to teach in an online environment and to become leaders in the development, implementation and evaluation of online programs. This includes helping students understand how various topics within subject areas are effectively represented using technology and pedagogical strategies required to teach these concepts online. This is accomplished through offering course work that addresses all three domains along with field experience opportunities. Through these experiences, students would be prepared to teach in online and blended educational environments.

Degree Requirements: 15 credit hours including a Capstone (EDT 580)
The certificate requires five courses, each consisting of three credit hours. The culminating experiences for this certificate program is an electronic portfolio that will be completed in EDT 580 Practicum in Online Teaching.

Admission Requirements: All applicants must hold a bachelor's degree from a regionally accredited institution or have an equivalent credential as determined by the Graduate College. Applicants must submit the Graduate College online application and meet all Graduate College requirements.

## Contact Information:

Teachers College, Mary Lou Fulton
Educational Leadership \& Innovation, Division
http://education.asu.edu
FAB S236
educationadvising@asu.edu
602-543-6358

## Physical Education, MPE (ECPHYEDMPE)

Online Degree Search Title: Physical Education - Polytechnic Campus (MPE)
Campus: POLY
Program Description: Graduates of the M.P.E. program gain advanced knowledge of curriculum, instructional practices in physical education and sport. Emphasis is placed on improving instructional effectiveness and developing quality sport and physical education programs in school settings.

Degree Requirements: 33 credit hours a Written Comprehensive Exam and an Applied Project or 33 credit hours including the required course (PPE 593) a Written Comprehensive Exam and an Applied Project The program includes:

- An applied project which is included in the course hours noted below.
- Development of a professional portfolio.
- A final written comprehensive examination.

The degree has two tracks.
Physical education K-12 teaching track:

- Core studies (21).
- Education cognate courses (6).
- Electives (6).

Physical education pedagogy track:

- Core studies (21).
- Education cognate courses (6).
- Electives (6).

Admission Requirements: In addition to the Graduate College application, submit the following items:

- Current resume.
- Letter of intent including reasons for interest in the program and program match with applicant's professional goals.
- Official transcripts
- Three professional letters of recommendation addressing experiences with children and/or families.


## Contact Information:

Teachers College, Mary Lou Fulton
Educational Leadership \& Innovation, Division
http://education.asu.edu
SANCA 331
educationadvising@asu.edu
602-543-6358

## Secondary Education (Educational Technology), MEd (TESEDTCMED) <br> Online Degree Search Title: Secondary Ed (ED Technology) (MEd) <br> Campus: ONLNE, WEST

Program Description: This program advances the knowledge and skill of future high school or middle school teachers. It is designed to assist practicing teachers acquire the knowledge base and skills necessary to develop and provide the most current instructional methods and materials for their students.

Degree Requirements: 33 credit hours and an Applied Project
Students must complete a total of 33 credit hours, including 15 credits in their concentration and an applied project which completes the program.

Admission Requirements: Applicants must apply to the ASU Graduate College and to the specific program and concentration to which they seek admission. Admission to a degree program is based on:

- The availability of faculty to supervise academic areas of interest.
- Letters of recommendation.
- Personal statement.
- Undergraduate and/or graduate GPAs.
- Work and academic experience.

Applicants to the elementary or secondary programs must hold valid Arizona teaching certificates for those grade levels unless they are pursuing an M.Ed. with certification OR have two years of teaching experience.

## Contact Information:

Teachers College, Mary Lou Fulton
Educational Leadership \& Innovation, Division
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educationadvising@asu.edu
602-543-6358

## Secondary Education (Reading), MEd (TESERDGMED)

Online Degree Search Title: Secondary Education (Reading) (MEd)

Program Description: This program advances the knowledge and skill of future high school or middle school teachers. The program leads towards an Arizona state endorsement as a reading specialist. It is designed to assist practicing teachers acquire the knowledge base and skills necessary to develop and provide the most current instructional methods and materials for their students.

Degree Requirements: 33 credit hours and a Written Comprehensive Exam
Students must complete a total of 33 credit hours including 15 credits in their concentration and a comprehensive examination or an applied project, which completes the program.

Admission Requirements: Applicants must apply to the ASU Graduate College and to the specific program and concentration to which they seek admission. Admission to a degree program is based on:

- The availability of faculty to supervise academic areas of interest.
- Letters of recommendation.
- Personal statement.
- Undergraduate and/or graduate GPAs.
- Work and academic experience.

Applicants to the elementary or secondary programs must hold valid Arizona teaching certificates for those grade levels unless they are pursuing an M.Ed. with certification OR have two years of teaching experience.

## Contact Information:

Teachers College, Mary Lou Fulton
Educational Leadership \& Innovation, Division
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602-543-6358

## Secondary Education (Teacher Certification), MEd (TESCERTMED)

Online Degree Search Title: Secondary Ed (Teacher Certification) (MEd)
Campus: DTPHX, POLY, TEMPE, WEST

Program Description: The master's degree in secondary education with teacher certification is appropriate for those with bachelor's degrees who wish to earn Arizona secondary school (grades 7-12) teaching certification in a specific subject area along with a master's degree. There are three three tracks, providing different delivery options:

- The Masters and Certification (MAC) with evening classes for two semesters plus one summer semester and a semester of student teaching.
- The Intern Masters and Certification (INMAC) for those holding Arizona Intern teaching certificates and employed as teacher of record by a school district, charter, or private school.
- TEAMS, an intensive accelerated program for math or science certification with year-long student teaching.

Degree Requirements: 33 credit hours including the required course (SED 593) and an Applied Project The M.Ed. in secondary education requires an applied project which is included in the student's plan of study and must be completed during student teaching or apprentice teaching.

Admission Requirements: All applicants must submit the Graduate College online application and meet Graduate College admission requirements.

## Contact Information:

Teachers College, Mary Lou Fulton
Educational Leadership \& Innovation, Division
http://education.asu.edu
FAB S237
educationadvising@asu.edu
602-543-6358

Online Degree Search Title: Special Ed (Teacher Certification) (MEd)

## Campus: DTPHX, POLY, TEMPE, WEST

Program Description: The master's in special education with Arizona certification, is a specialization designed for those individuals with a bachelor's degree who want to earn an M.Ed. along with dual Arizona certifications in K-12 special education and grades one to eight elementary education. Students also receive a mild cross-categorical endorsement and provisional ESL endorsement. Students may choose one the following delivery modes for which they qualify:

- Masters and Certification (MAC) consisting of on campus evening program delivered in two academic semesters (evening), one summer and one additional academic semester of student teaching.
- Intern Masters and Certification (INMAC) available to students who hold a state intern teacher certificate and are employed as teacher of record in a district, charter or private school.
- ASPIRE, available to students who meet requirements for that federally funded program. Please contact academic advising for more information.

Degree Requirements: 33 credit hours including the required course (SPE 593) and an Applied Project
Students must complete 33 credit hours and an applied project. The applied project is completed during the student teaching or apprentice teaching experience.

Admission Requirements: Applicants must submit a Graduate College online application. Admission to a degree program is based on undergraduate and/or graduate GPA.
A prerequisite course in introductory special education must also be met: SPE 222, SPE 311 and SPE 511.

## Contact Information:

Teachers College, Mary Lou Fulton
Educational Leadership \& Innovation, Division
http://education.asu.edu
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educationadvising@asu.edu
602-543-6358

## Technology for Teaching and Learning (certificate), CERT (EDEDTTGRCT)

Online Degree Search Title: Technology for Teaching and Learning (Grad Certificate)
Campus: TEMPE
Program Description: The graduate certificate in technology for teaching and learning is geared towards classroom teachers who want to become skilled at integrating technology in the curriculum. Students will acquire the knowledge and skills needed to meet the National Education Technology Standards for Teachers (NETS) developed by the International Society for Technology in Education (ISTE) and being adopted by the National Council for Accreditation for Teacher Education (NCATE). All courses will be offered online and face-to-face. The certificate program can be completed within a two-year period.

Degree Requirements: 15 credit hours including a Capstone Course (EDT 591)
Students must successfully complete four out of a possible six educational technology courses before completing a three-credit required capstone course.

Admission Requirements: The graduate certificate in technology for teaching and learning is available to all ASU graduate students provided they meet eligibility criteria. To be eligible for this program, the applicant must 1) hold a bachelor's degree or equivalent from a regionally accredited institution, and 2) have a cumulative junior/senior undergraduate GPA of 2.50 or higher.
All applicants must submit the Graduate College online application.Students interested in earning this certificate must apply to the certificate program via the online Graduate College application. Applicants will also need to supply 1) a curriculum vitae or resume, and 2) one set of official transcripts from every college and university (excluding ASU) that they have attended.

## Contact Information:

Teachers College, Mary Lou Fulton
Dean, Mary Lou Fulton Teachers College
http://education.asu.edu
ED 120
educationadvising@asu.edu
602-543-6358

## Technology and Innovation, College of

Agribusiness, MS (AGAGRIBMS)
Online Degree Search Title: Agribusiness (Polytechnic Campus) (MS)
Campus: POLY
Program Description: The Morrison School of Management and Agribusiness at the Polytechnic campus offers the M.S. in agribusiness. This degree is designed to prepare students from a variety of backgrounds with a set of critical and analytical business skills, while recognizing the unique demands of the agribusiness and resource management sectors. Graduates are well prepared for successful administrative or managerial careers with either government or private-sector organizations in either field. Students are able to select either a research-oriented program, which leads to the completion of a supervised thesis, or a program consisting of course work only (nonthesis option). The nonthesis option allows students to develop an area of specialization and apply these skills to a real-world agribusiness problem through an integrative, capstone course experience. Both the thesis and nonthesis options require the completion of a common set of core courses. These options also apply to the concentrations in 1) agribusiness management and marketing, and 2) food quality assurance.

Degree Requirements: 36 credit hours a Written Comprehensive Exam and including a Capstone Course (AGB 589) (MIP) or 36 credit hours and a Thesis or 36 credit hours including a Capstone Course (AGB 589)

Core requirements for this program include 21 credit hours of course work. Thesis students fulfill the remaining 15 credit hours by taking three research credits, six thesis credits and six hours of electives. Nonthesis students fulfill the remaining hours by taking 15 hours of electives.
It is suggested that students take a coherent sequence of courses such as those indicated below, but considerable flexibility is possible based on individual backgrounds and interests.
Thesis and Nonthesis M.S. in Agribusiness
Semester I
AGB 528 Advanced Agribusiness Marketing (3)
AGB 560 Advanced Agribusiness Management Systems (3)
AGB 561 Agribusiness Research Methods (3)Semester II
AGB 511 Advanced Agribusiness Management (3)
AGB 532 Advanced Agribusiness Finance (3)
AGB 570 Managerial Economics for Agribusiness (3)Semester III
AGB 589 Applied Research Methods (3)
500-level AGB emphasis electives (6)Semester IV
Nonthesis Option
500-level AGB emphasis or other electives (9)Thesis Option
AGB 592 Research (3)
AGB 599 Thesis (6)

## Admission Requirements:

- Applicants to the program are required to submit the Graduate College online application and meet the minimum requirements for admission to the Graduate College.
- Scores from the GRE, Miller Analogies Test or GMAT are required.
- Applications must include a curriculum vitae and statement of purpose. The statement of purpose must offer evidence of the applicant"s basic skills in economics, accounting, statistics and computer use, as well as some experience or knowledge in an area related to agribusiness.
- Letters of recommendation are suggested.

Applicants not meeting this last requirement may be considered for admission with deficiencies. The application deadline for admission in the fall semester is Feb. 1.
The Morrison School of Management and Agribusiness awards assistantships to selected candidates. These support ongoing research and teaching activities. The awards are made on the basis of availability and according to the needs of the faculty and interests of the students. Scholarships are also available on a competitive basis for qualified candidates.

## Contact Information:

Technology and Innovation, College of Morrison School of Agribusiness and Resource Mgmt
http://morrison.asu.edu/

## Applied Biological Sciences, MS (TSAPBIOSMS) <br> Online Degree Search Title: Applied Biological Sciences (MS) <br> Campus: POLY

Program Description: The M.S. in applied biological sciences is designed to educate students who are technically proficient in the laboratory and the field, who know the technical literature in their field of research, who are articulate in oral and written communication and who understand the societal and policy implications of their work. The degree is supported by faculty with backgrounds in:

- Biotechnology.
- Ecological restoration.
- Environmental biotechnology.
- Environmental policy.
- Plant systematics.
- Urban horticulture.
- Wildlife biology.

All students are required to complete a core of graduate courses, conduct a research project under the direction of a faculty member and prepare and defend a research thesis.

Degree Requirements: 30 credit hours and a Thesis
Plan of Study: All students are required to complete two seminars: ABS 591 in the spring semester and ABS 691 in the fall semester. The remaining hours are chosen to support the student's educational objectives.
There are no foreign language requirements and no comprehensive examinations.
Thesis Requirements: A thesis which constitutes six credit hours, of the total 30 hours, is required .
Final Examinations: A final oral examination covering the thesis and related subject matter is required.

Admission Requirements: All applicants must submit an online application to the Graduate College and must meet the minimum requirements for admission. In addition, scores from the GRE (minimum score of 1080, verbal and quantitative combined) or Miller Analogies Test (minimum score 45) are required. Applicants are expected to have completed 18 credit hours in biological sciences and closely-related courses. Specific fields of study may have specific expectations regarding courses taken at the undergraduate level. Applicants not meeting these course requirements may be considered for admission with deficiencies.
Submit the following separate application materials to:
Graduate College Admissions
Arizona State University
Interdisciplinary B \#170
PO Box 871003
Tempe, AZ 85287-1003

- A resume.
- A statement of intent (maximum 600 words) explaining, 1) the applicant's interest in environmental resources, 2) the applicant's academic background, and 3) the applicant's educational objectives.
- Three letters of recommendation from references who are qualified to comment on the applicant's potential in the selected area of study.


## Application Deadlines

For fall enrollment, application materials are due to Applied Biological Sciences and the Graduate College by March 15.
For spring enrollment, application materials are due to Applied Biological Sciences and the Graduate College by Oct. 15.
Selection Procedures and Notifications
Department faculty evaluate the applications and supporting materials and recommend to the Graduate College whether the applicant should be granted regular or provisional admission or if admission should be denied. If admission is provisional, the Graduate College, in its letter of admission, specifies the provisions that need to be met to gain regular status. The school informs successful applicants of the procedures for enrollment.

## Contact Information:

Technology and Innovation, College of

## Applied Psychology, MS (ECAPSYCHMS) <br> Online Degree Search Title: Applied Psychology (Polytechnic Campus) (MS) Campus: POLY

Program Description: The M.S. in applied psychology at Arizona State University's Polytechnic campus is a two-year program that provides students with opportunities for practical experience in diverse laboratories as well as internships in a variety of settings. Our program is hands-on and challenging, and the field is growing quickly, creating opportunities for further study and employment. Our areas of application include:

- Applied cognitive science.
- Consumer psychology.
- Human factors.
- Learning design.
- Sports psychology.

Recent graduates are working at places like Intel, Boeing, GoDaddy.com, and the Air Force Research Lab. Recipients of our M.S. degree have also gone on to pursue a Ph.D. at ASU and other top programs.
The M.S. program offers specialized training to complement the B.S. in applied psychology at the Polytechnic campus.

Degree Requirements: 30 credit hours and a Thesis or 30 credit hours including the required course (PSY 593) and an Applied Project This M.S. requires the completion of 30 credit hours with grades of "B" (3.00) or higher. Students have the option of doing a thesis or an applied project to develop and demonstrate professional knowledge and skills. Students who plan to go on to a doctoral program are encouraged to complete a thesis. Work on the thesis will continue for at least a calendar year under faculty supervision. The first three credits will be devoted to developing an idea and preparing a proposal for approval by a faculty committee. The next three credits will allow for preparing the details of research design and data collection for the thesis (materials, computer programs, experimental text beds, questionnaires, etc.). The final six credits will be devoted to collecting and analyzing data and writing and revising the thesis under the direction of the advisor. Students will defend the thesis in an oral examination.
Students selecting the applied project option will, under the guidance of an advisor, allocate the 12 credit hours to a combination of research, practicum, project activities and report writing appropriate to the goals of the student and the program and the availability of practicum or internship opportunities. In all cases, the project will culminate in a substantial written report followed by a comprehensive oral examination covering the project and other materials from required courses.

Admission Requirements: Applicants must have a bachelor's degree in psychology or a related field (including engineering, computer science, or business), an undergraduate GPA of 3.00 or better, and GRE scores of at least 500 on both the verbal and the quantitative components. Applicants must apply through the online application with the Graduate College to be considered.
Applicants must also provide a personal statement describing their professional and academic aspirations, as well as three letters of reference from college professors and/or employers (in a field relevant to human factors work).
To guarantee full consideration, applicants must submit all required materials by Jan. 15 for admission in the fall of that year. We do also offer spring admissions, and all materials for admission must be received by Oct. 1 to guarantee full consideration. We do offer rolling admissions for exceptional candidates, although we cannot guarantee funding for students accepted outside of our regular application period.

## Contact Information:

Technology and Innovation, College of Faculty of Applied Psychology
http://technology.asu.edu/appliedpsych
SANCA 150
russ.branaghan@asu.edu
480-727-5157

## Business Administration (Agribusiness), PHD (BAAGRIPHD)

Online Degree Search Title: Agribusiness (PhD)
Campus: TEMPE

Program Description: The objective of the agribusiness Ph.D. program is to produce scholars who are trained in the latest methods of business and economic analysis and who can apply these methods to critical research problems faced by firms in the agribusiness industry. With this background, graduates with a concentration in agribusiness are qualified to assume teaching and research positions at top-ranked research universities.
Agribusiness Ph.D. students are involved with research in:

- Consumer behavior in food markets.
- Derivatives, commodity trading and risk management.
- Food and fiber supply chain management.
- International agricultural trade and policy.
- Strategic marketing by food retailers.

Degree Requirements: 84 credit hours a Written Comprehensive Exam a Prospectus and a Dissertation
Plan of Study
At least 30 hours (which may include research credit) of the approved Ph.D. program and 12 dissertation hours must be completed after admission to the student's Ph.D. program. Students may not apply credit hours earned for a doctoral degree previously awarded at ASU or another institution toward their current ASU doctoral degree. However, at the individual academic unit's discretion, students may apply up to 30 credit hours from a previously awarded master's degree toward their doctoral plan of study. Agribusiness Ph.D. students are expected to develop a program of study that consists of three elements:

- A core of theory and quantitative methods course work in economics and management from the W. P. Carey School of Business.
- Advanced courses in at least one of economics, finance, marketing, supply chain management or management from the W. P. Carey School of Business.
- A three-course sequence of Ph.D.-level theory and methods as applied to issues and concepts specific to the agribusiness sector from the Morrison School of Management and Agribusiness.

The agribusiness Ph.D. is designed to allow "flexibility with focus," so each student's program of study is unique, but is designed to produce the highest level of research competency in the student's chosen area of interest.

## Comprehensive Examinations

Upon completion of all necessary course work on a student's approved program of study, the academic unit may initiate the scheduling and administering of a student's comprehensive examinations. The comprehensive examination consists of a minimum of a written exam; at the discretion of the academic unit, an oral exam may also be required.
Candidacy
Ph.D. students are notified of achieving candidacy status in a letter from the dean of the Graduate College upon 1) passing the comprehensive examinations, and 2 ) successfully defending the dissertation prospectus.
Dissertation Requirements
Students are required to present a dissertation to satisfy the research requirement for the Ph.D. degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.
Students must be enrolled in at least one credit hour that appears on the program of study or one hour of appropriate graduatelevel credit (such as 795 Continuing Registration) during the semester (including summer session) in which the student defends the dissertation.
Note: For detailed information regarding the university's doctoral degree requirements, please refer to the Graduate College's Doctor of Philosophy policy and procedures.
Maximum Time Limit
Doctoral students must complete all program requirements within a 10-year period. The 10-year period starts with the initial enrollment into the doctoral program. In addition, the student must take the final oral examination in defense of the dissertation within five years after passing the comprehensive examinations. Any exception must be approved by the supervisory committee and the dean of the Graduate College, and ordinarily involves repetition of the comprehensive examinations.

Admission Requirements: All applicants must submit the Graduate College online application. Applications are initially reviewed by a faculty committee using a portfolio approach. In addition to GRE or GMAT scores and prior academic performance, letters of recommendation and a personal statement are reviewed to ensure a good "fit" between the student's goals and the department. A recommendation for action is then made to the associate dean in the W. P. Carey School of Business who in turn makes a recommendation to the Graduate College. The Graduate College either admits or denies each applicant and notifies them in writing.

## Contact Information:

Technology and Innovation, College of
Morrison School of Agribusiness and Resource Mgmt
http://morrison.asu.edu/grad/phd/
BA 171
wpcareyphd@asu.edu
480-965-3368

## Computing Studies, MCSt (TSCOMPMCST) <br> Online Degree Search Title: Computing Studies - Polytechnic Campus (MCST) Campus: POLY

Program Description: The faculty of the Department of Engineering offers the M.C.S.T. graduate program. This program prepares students with the technical and professional knowledge necessary for career advancement and positions of leadership in computing through challenging problem-based, laboratory-rich course work and an applied research component. Graduate students study in a variety of areas, including:

- Distributed and Web-based applications.
- Embedded systems.
- Operating systems.
- Software systems.
- Visualization.

Graduates of the M.C.S.T. program may pursue advanced research degrees in the computing discipline, procure employment in one of the high growth and dynamic computing application areas or pursue careers in allied fields by leveraging computing interests in areas such as engineering, biology or business. In addition to academic credentials, departmental faculty have extensive industry experience.

Degree Requirements: 33 credit hours and a Thesis or 33 credit hours and an Applied Project
The plan of study must contain approved graduate-level course work. At least 18 of these credit hours must be 500-level courses (excluding CST 598 ST: Special Topics courses). A maximum of six credit hours may be taken at the 400 -level. In keeping with the learning objectives of the Polytechnic campus, students must complete three credit hours of CST 584 Supervised Internship or three credit hours of CST 590 Reading and Conference to fulfill the degree requirements. Students must complete at least 12 credit hours in a primary area of specialization that is also used as the technical area for the research component. To promote breadth, M.C.S.T. students must take a total of nine credit hours in at least two additional specialization areas distinct from the primary specialization area. Areas of specialization are:

- Distributed and web-based applications.
- Embedded systems.
- Operating systems and networks.
- Software systems and visualization.

Thesis Option (33)
Specialization (12)
Supporting area (9)
Research methods courses (12): CST 500 RM: Research/Writing (2)
CST 584 Internship or CST 590 Reading and Conference (3)
CST 591 Seminar (1)
CST 599 Thesis (6)
Nonthesis Option (33)
Specialization (15)
Supporting area (9)
Research methods courses (9): CST 500 RM: Research/Writing (2)
CST 584 Internship or CST 590 Research and Conference (3)
CST 591 Seminar (1)
CST 593 Applied Project (3)
Admission Requirements: Applicants are expected to satisfy all requirements for admission to the Graduate College, including a Graduate College online application. It is recommended that applicants have completed a bachelor's degree in computing. Excellent applicants with partial computing background may be admitted with undergraduate computing deficiencies that must be completed early in the graduate program. Applicants must submit scores for the GRE, including verbal, quantitative and analytical. The subject test in computer science is not required. International applicants must submit results of the Test of English as a Foreign Language (TOEFL). Applicants for fall semester admission should submit all materials to the Graduate College by March 1, and applicants for spring semester should submit all admission materials by Oct. 1.

## Contact Information:

Technology and Innovation, College of
Department of Engineering
http://technology.asu.edu/engineering/
SANTN 230
egr@asu.edu
480-727-2727

## Simulation, Modeling, and Applied Cognitive Science, PHD (TSSMACSPHD)

Online Degree Search Title: Simulation, Modeling, and Applied Cognitive Science (PhD)
Campus: POLY

Program Description: Simulation, modeling and applied cognitive science describes a growing transdisciplinary field (including the disciplines of psychology, engineering and computer science) that explores how people interact with technological and social systems in contexts that include transportation, medicine, military, computing and other complex systems. Cognitive science provides the foundation necessary for integrating human capabilities and limitations into complex sociotechnical systems (i.e., the practice of cognitive engineering), and the application of cognitive science relies heavily on simulation and modeling methods. A large domain exists in which coupling applied cognitive science with simulation and modeling is imperative. Examples include:

- Development of intelligent agents.
- Driving simulators for research on driver distraction.
- Dynamical systems models of team interaction.
- Gaming simulators for studying business decision-making.
- Human-in-the-loop simulation studies of cybersecurity analysis.
- Models of cognitive states and processes or sociocultural systems.
- Medical simulation for health care research.
- Nuclear control room simulation for improved human system integration.
- Pilot training research using aircraft simulators.
- Tests of future airspace control concepts using air traffic control simulators.

This Ph.D. is designed to produce individuals who are well-grounded in simulation, modeling and cognitive science and skilled in its methods. Employers (e.g., Department of Defense, Federal Aviation Administration, Nuclear Regulatory Commission, hospitals) have an ever-increasing demand for personnel who can bridge the gap between rigorous science and solutions to real-world problems. The Ph.D. degree will provide transdisciplinary, research-driven training in the computing, engineering, technology, applied cognitive science and human systems integration.

Degree Requirements: 84 credit hours a Written Comprehensive Exam an Oral Comprehensive Exam a Prospectus and a Dissertation Students will work with a committee of at least three faculty members to design a program of study tailored to the student's interests and background. There will be considerable flexibility in setting the plan of study but it must include a minimum number of credit hours in the areas of foundations, tools and methods, applications, research and scholarship. The program should also aim for an interdisciplinary education by including work in various disciplines. The degree requires 84 credit hours, with up to 30 credit hours accepted from a previously awarded master's degree. Electives can be chosen to provide additional breadth or depth depending on the student.

Admission Requirements: A master's degree in psychology, engineering, cognitive science, computer science or closely related field is required. Applicants should submit:

- A transcript from their master's program.
- GRE scores (taken within the last five years).
- A statement of research interests.
- Three letters of recommendation.

The application deadline for fall semester is Jan. 31 of that calendar year, and spring semester is Sept. 30 of the previous calendar year.

## Contact Information:

Technology and Innovation, College of
Faculty of Applied Psychology
http://technology.asu.edu/

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Nancy.Cooke@asu.edu
480-988-2173

## Technology (Alternative Energy Technologies), MSTech (TSATMSTECH)

Online Degree Search Title: Alternative Energy Technologies (MSTech)
Campus: POLY
Program Description: The M.S. in technology with a concentration in alternative energy technologies explores the demands of energy resources in the new economy. This degree program is designed for sufficient flexibility to permit the student to select a combination of courses in a technical concentration, alternative energy technologies and supporting area to meet individual career goals. The research activities in the alternative energy technologies field include the use of energy sources such as solar, wind, ocean, geothermal and biomass. At the heart of the program is the concept of the solar-hydrogen cycle, a renewable energy scenario that comprises production of electricity from solar energy, and utilizing electricity to split water into its elemental parts. The required research provides students with an opportunity to develop special research and application skills directly related to individual needs and objectives in the field of alternative energy technologies.

Degree Requirements: 33 credit hours and a Thesis or 33 credit hours including the required course (EST 593) and an Applied Project Thesis Option (33)
Concentration (15-16)
Supporting Area (8-9)
Research methods courses:
EST 500 Research/Writing (2)
EST 591 Graduate Seminar (1)
EST 599 Thesis (6)
A minimum of 20 credit hours must be 500 -level courses. At least nine hours of 500 -level course work must be included in the technical concentration. Students may take up to six credit hours of 400 -level course work to broaden their technical knowledge within the concentration or supporting area. Students are required to complete six hours of EST 599 Thesis, write a thesis and make an oral defense. All course work applied toward the minimum 33 credit hour total must be at the 400 and 500 level.
Nonthesis Option (33)
Concentration (15-18)
Supporting Area (9-12)
Research Methods Courses:
EST 500 Research/Writing (2)
EST 591 Graduate Seminar (1)
EST 593 Project (3)
Admission Requirements: Prerequisites
Applicants are required to have earned a bachelor's degree that includes a minimum of 30 credit hours or equivalent in a technology area including course work applicable to the concentration being sought, and a minimum of 16 credit hours of mathematics and science. Depending upon the background of the student, the following application materials are necessary:

- Application fee.
- Domicile affidavit for applicants claiming Arizona residency.
- Financial guarantee form (required for international students). Visit the Graduate College website for more information.
- Graduate College online application.
- Official transcripts from every college and university previously attended.
- Test score reports. The Test of English as Foreign Language (TOEFL) report may be necessary for international students. The GRE is not required by the Department of Engineering Technology.


## Contact Information:

Technology and Innovation, College of
Department of Engineering Technology
http://technology.asu.edu/engrtech
TECH
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480-727-1584

Online Degree Search Title: Aviation Mgmt/Human Factors (MSTech)

## Campus: POLY

Program Description: The M.S.Tech. program offers a concentration in aviation management and human factors in the Department of Aeronautical Management Technology within the College of Technology and Innovation Applied Sciences. The program focus is on preparing graduates for a career in the aviation industry or as the foundation for further advanced study. Courses are offered at the Polytechnic campus, with some courses offered online. Graduates of this program are provided with technical and professional skills for use in leadership positions in industry and education. The program is designed for flexibility, permitting the student to select a combination of courses in a technical area and supporting area to meet individual goals.

Degree Requirements: 33 credit hours and a Thesis or 33 credit hours including the required course (AMT 593) and an Applied Project
The following are the core requirements for meeting the department's goal to provide an in-depth research and statistics background early in the program as a foundation for the student's thesis or applied project. The comprehensive elective curriculum design will offer courses that reflect current and applied topics.
Core Requirements
Twelve credit hours are required for thesis option, and nine credit hours for the applied project option. Course selection must include the following with others as approved by the committee.
AMT 593 Applied Project (3) or AMT 599 Thesis (6)
AMT 549 Applied Human Factors Research
PSY 530 Intermediate Statistics

Students have a choice of selecting a thesis option (12 credit hours of core courses plus 21 credit hours of selected course work) or an applied project option (nine credit hours of core courses plus 24 credit hours of selected course work). The detailed design of the graduate student's total program requirements ( 33 credit hours) with the selection of the required courses will be the responsibility of the student's supervisory committee chair and committee members.
The defining guideline for the department will be to match the student's specific career goals and objectives, as well as a balanced curriculum that can be achieved in a reasonable time and in accordance with a known course-offering schedule. The flexibility of customizing the specific curriculum, which will involve the student taking almost one-half of the total courses, will not be at the discretion of the student, but rather at the discretion of the supervisory committee who will ensure a well-structured program of study with represented courses from across the curriculum.
Additional Requirements
Twenty-one credit hours are required for the thesis option, and 24 credit hours for the applied project option.
AMT 520 Airline Pricing and Yield Management
AMT 521 Air Transportation Regulations
AMT 522 Aviation Law
AMT 523 Intermodal Transportation Management (former Aviation Systems Management)
AMT 524 Airport Management Operations
AMT 525 Airport Planning and Design
AMT 526 Aviation Labor Relations
AMT 527 Airline Management Strategies
AMT 528 International Aviation
AMT 529 Fixed-Base Operations Management
AMT 541 Aviation Physiology
AMT 545 Human Factors in Aviation
AMT 546 Crew Resource Management/LOFT
AMT 549 Applied Human Factors Research
All master's courses will be 500-level courses. A single course exception (400-level course) may be authorized with the consensus of the supervisory committee.

Admission Requirements: Admission to the M.S.Tech. program requires the completion of all general admission requirements and procedures set forth by the Graduate College, including the online Graduate College application. The College of Technology and Innovation requires an appropriate bachelor's degree from an accredited college or university, with a minimum of 30 credit hours in technology or equivalent and 16 credit hours of physical science and mathematics appropriate to the program pursued. The specific requirements vary within each department. To be considered for admission, a minimum 3.00 GPA is required.
Admission to the graduate degree program presupposes an adequate technical preparation in a selected technology at the undergraduate level. The applicant's past work and professional experience are also evaluated and taken into consideration when
determining admission classification. Admission into the M.S.Tech. program is based on a number of factors. These include, but are not limited to:

- Likelihood for success.
- Number of students currently enrolled in the program.
- Potential for successful placement.
- References from individuals qualified to judge academic potential.
- Resume.
- Statement of purpose.
- Test of English as a Foreign Language (TOEFL) score for applicants whose native language is not English.
- Undergraduate GPA.


## Contact Information:

Technology and Innovation, College of
Dept of Tech Entrepreneurship and Innovation Mgmt
http://technology.asu.edu/aviation
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480-727-1021

## Technology (Electronic Systems Engineering Technology), MSTech (TSSYMSTECH)

Online Degree Search Title: Electronics Engineering Technology (MSTech)
Campus: POLY

Program Description: The M.S.Tech. program promotes greater depth of understanding in electronics and its applications at a system level. The program is designed for sufficient flexibility to permit the student to select a combination of courses in a technical concentration and supporting area to meet individual career goals. The required research provides students with an opportunity to develop special research and application skills directly related to individual needs and objectives. The Department of Engineering Technology provides students with a concentration in electronic systems engineering technology.

Degree Requirements: 33 credit hours and a Thesis or 33 credit hours including the required course (EST 593) and an Applied Project The degree requirements for the M.S.Tech. with a concentration in electronic systems engineering technology offered by the Department of Engineering Technology include:
Thesis Option (33)
Concentration (15-16)
Supporting Area (8-9)
Research Methods Courses:
EST 500 Research/Writing (2)
EST 591 Graduate Seminar (1)
EST 599 Thesis (6)
At least nine hours of 500-level course work must be included in the technical concentration. Students may take up to six credit hours of 400-level course work to broaden their technical knowledge within the concentration or supporting area. Students are required to complete six hours of EST 599 Thesis, write a thesis and make an oral defense.
Nonthesis Option (33)
Concentration (15-18)
Supporting Area (9-12)
Research Methods Courses:
EST 500 Research/Writing (2)
EST 591 Graduate Seminar (1)
EST 593 Applied Project (3)
At least nine hours of 500-level course work must be included in the technical concentration. A maximum of three credit hours of EST 593 Applied Project may be applied toward the 20 credit -hour, 500-level minimum. Additional background deficiency hours may be required. All course work outside the Department of Engineering Technology must be preapproved by the department chair. A final oral comprehensive examination is required. Any candidate who fails in that examination may, upon recommendation of the committee and approval of the dean of the Graduate College, be granted a second examination. The second examination is final. A final copy of the applied project report or thesis must be submitted before the candidate is eligible for this examination.
Plan of Study
Course work: the student selects a concentration and supporting area, as well as a subset of courses from each area. Specifically, five to six courses are selected from the concentration area, and three or four are selected from the supporting area. Early in the
program, the student identifies a major advisor, who is a faculty member of the department interested in the selected area of concentration. The student works with the major advisor to develop the program of study and subsequently to carry out the research component of the program.
Research: each student, as a part of the degree program, is required to complete an applied project or thesis within the student's area of emphasis. The applied project includes a written report.
Research Activity: research activities in the Department of Engineering Technology include systems, circuit applications and digital design. Research in microelectronics areas including device processing/fabrication, device packaging and reliability testing are explored utilizing the microelectronics laboratory clean-room facilities. Electronic systems and alternative energy technologies are also topics of research by department faculty and graduate students. M.S.Tech. candidates will find a broad range of research that can lead to an applied project or thesis.

## Admission Requirements: Prerequisites

Applicants are required to have earned a bachelor's degree that includes a minimum of 30 credit hours or equivalent in a technology area including course work applicable to the concentration being sought, and a minimum of 16 credit hours of mathematics and science. Depending upon the background of the student, the following application materials are necessary:

- Application fee.
- Domicile affidavit for applicants claiming Arizona residency.
- Financial guarantee form (required for international students). Visit the Graduate College website for more information.
- Graduate College online application.
- Official transcripts from every college and university previously attended.
- Test score reports. The Test of English as Foreign Language (TOEFL) report may be necessary for international students. The GRE is not required by the Department of Engineering Technology.

Admission to the Graduate College and the Department of Engineering Technology requires excellent attainments in prior university course work and academic experience equivalent to the bachelor's degree in the area of proposed study. Admission is based upon:

- Academic attainments in post-baccalaureate course work, if appropriate.
- Academic attainments in undergraduate course work, including junior/senior GPA, overall undergraduate GPA and GPA in major courses.
- Academic preparation in the chosen field of study for the master's degree.
- Any other supporting information provided by the applicant, such as educational and career objectives, explanation of background or letters of reference.


## Contact Information:

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Department of Engineering Technology
http://technology.asu.edu/engrtech
TECH 101
engrtech@asu.edu
480-727-1584

## Technology (Environmental Technology Management), MSTech (TSMGMSTECH)

Online Degree Search Title: Environmental Tech Mgmt (Polytechnic Campus) (MSTech)
Campus: ONLNE, POLY

Program Description: The M.S.Tech. with a concentration in environmental technology management provides three areas of study:

- Emergency management.
- Environmental management.
- International environmental management.

Classes are scheduled to minimize disruption of work schedules by meeting six times a semester on alternating Fridays and Saturdays. A Web-based distance learning format is also available.

Degree Requirements: 33 credit hours and a Thesis or 33 credit hours and an Applied Project
Concentration area course work includes 12 credit hours of core classes and 15 credit hours of approved electives.
Supporting course work includes the following areas of study:

- Air pollution.
- Comprehensive emergency management.
- Environmental chemistry.
- Environmental risk assessment.
- International environmental law.
- International environmental management.
- Principles of hazardous materials/waste.
- Soils and groundwater contamination.
- Sustainability and sustainable development.
- Terrorism, weapons of mass destruction and current issues.

Admission Requirements: Admission to the M.S.Tech. program requires the completion of all general admissions requirements and procedures set forth by the Graduate College, including the online Graduate College application. The College of Technology and Innovation also requires an appropriate bachelor's degree from an accredited college or university, with a minimum of 30 credit hours in technology or its equivalent and 16 credit hours of science and mathematics appropriate to the program pursued. Admission to the graduate degree program presupposes an adequate technical preparation in a selected technology at the undergraduate level. Deficiencies for admission to the graduate degree program, if any, are specified at the time of admission. The applicant's past work and professional experience are also evaluated and taken into consideration when determining admission classification. To be considered for regular admission, a minimum 3.00 GPA is required. Applicants should submit a letter of application and a current resume for review by the graduate faculty in the technical concentration.

## Contact Information:

Technology and Innovation, College of
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http://technology.asu.edu/etm
WANER 101
technology@asu.edu
480-727-1444

## Technology (Global Technology and Development), MSTech (TSGTMSTECH)

Online Degree Search Title: Global Technology and Development (MSTech) Campus: POLY

Program Description: The M.S.Tech. program with a concentration in global technology and development is designed to integrate diverse areas of technical expertise and various academic disciplines with an awareness and understanding of how technology, processes of globalization and society influence one another.
The global technology and development (GTD) concentration provides students with a comprehensive understanding of systems of technology, how they interface, and their role in global economic, political and social development and change. The GTD concentration integrates the study of economic, social and political development with technology course work to explore issues critical to 21st-century globalization and the role and impact of technological innovations on societies around the world. Students completing the GTD concentration gain knowledge and skills to become technology interpreters and are prepared for careers in:

- Government service.
- International development.
- International management.
- Technology-related public policy.

Degree Requirements: 33 credit hours a Written Comprehensive Exam and an Oral Comprehensive Exam or 33 credit hours and a Thesis or 33 credit hours including the required course (GTD 593) and an Applied Project
At least 24 credit hours must be 500-level courses. A maximum of six credit hours of course work at the 400 level can be included in the program of study.

Admission Requirements: Students interested in applying to this degree program must submit the Graduate College online application. Students applying to the global technology and development concentration must have:

- An appropriate bachelor's degree from an accredited college or university.
- A combination of course work in the social sciences and technology/science.
- Some element of international or intercultural knowledge, which could be fluency in a foreign language, academic course work or having resided in another country.


## Contact Information:

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TECH 102
technology@asu.edu
480-727-1533

## Technology (Graphic Information Technology), MSTech (TSGIMSTECH)

Online Degree Search Title: Graphic Information Technology (MSTech)
Campus: ONLNE, POLY

Program Description: The M.S.Tech. with a concentration in graphic information technology provides students with the opportunity to study within the various areas of graphics. The areas include:

- 3-D modeling.
- Animation.
- Digital photography.
- Multimedia.
- Traditional and digital printing and publishing.
- Web development.

The courses offered in this degree program provide students with a working knowledge of the different facets of the graphic information industry with a focus on graphic communication. This is not a traditional information technology, computer science, computer information systems or information systems management program. The degree program is offered either as an oncampus or online distance learning format.

Degree Requirements: 33 credit hours and a Thesis or 33 credit hours and an Applied Project
All candidates for the M.S.Tech. program are required to complete a minimum of 33 credit hours of graduate course work. Of these, a minimum of 18 credit hours must be 500 -level courses and part of the approved program. Additional courses may be assigned by the faculty supervisory committee depending on the background of the candidate. The minimum degree requirements are as follows:
Thesis Option (33)
Supporting area (9)
Technical area of emphasis (18)
Thesis (6)
Applied Project Option (33)
Technical area of emphasis (18)
Supporting area (9)
Research course (3)
Applied Research Project (3)
A maximum of nine credit hours of appropriate graduate course work completed before admission may be included in the program of study for the degree program. Most graduate degree students in this program elect to do an applied project rather than a thesis. The applied project generally allows the student to thoroughly explore a graphic problem and demonstrate knowledge of the problem, solutions for the problem and suggestions for further explanation of the problem.

Admission Requirements: Admission to the M.S.Tech. program requires the completion of all general admissions requirements and procedures set forth by the Graduate College, including the Graduate College online application. The College of Technology and Innovation also requires an appropriate bachelor's degree from an accredited college or university, with a minimum of 30 credit hours in technology or its equivalent and 16 credit hours of science and mathematics appropriate to the program pursued. Admission to the graduate degree program presupposes an adequate technical preparation in a selected technology at the undergraduate level. Deficiencies for admission to the graduate degree program, if any, are specified at the time of admission. The applicant's past work and professional experience are also evaluated and taken into consideration when determining admission classification. To be considered for regular admission, a minimum 3.00 GPA is required. Applicants should submit a letter of application and a current resume to the Department of Engineering for review by the graduate faculty in the technical concentration.

## Contact Information:

Technology and Innovation, College of
Dept of Tech Entrepreneurship and Innovation Mgmt
http://technology.asu.edu/git
SANTAN 230

## Technology (Integrated Electronic Systems), MSTech (TSESMSTECH) <br> Online Degree Search Title: Integrated Electronic Systems (MSTECH) Campus: POLY

Program Description: The M.S.Tech. with a concentration in integrated electronic systems covers the processes and technology used to develop, design, manufacture and exploit integrated electronic functions on silicon, in packages and on boards. This degree program is designed for sufficient flexibility to permit the student to select a combination of courses in a technical concentration, integrated electronic systems and supporting area to meet individual career goals. The program provides hands-on laboratory experience in integrated circuit device fabrication and manufacturing in a setting that emulates the real industry. The required research provides students with an opportunity to develop special research and application skills directly related to individual needs and objectives in the field of microelectronics.

## Research activity

Research activities in the Department of Engineering Technology, include circuit applications and digital design. Research is conducted in the areas of microelectronics/integrated electronic systems, including design, device processing/fabrication, silicon device in packages and on boards and exploit integrated electronics functions in various applications. The research activities in the alternative energy technologies field, include exploration of the demands of energy resources in the new economy and use of energy sources such as solar, wind, ocean, geothermal and biomass. M.S.Tech. candidates will find a broad range of research topics that can lead to an applied project or thesis.

Degree Requirements: 33 credit hours and a Thesis or 33 credit hours including the required course (EST 593) and an Applied Project Thesis Option (33)
Concentration (15-16)
Supporting Area (8-9)
Research Methods Courses:
EST 500 Research/Writing (2)
EST 591 Graduate Seminar (1)
EST 599 Thesis (6)
A minimum of 20 credit hours must be 500 -level courses. At least nine hours of 500 -level course work must be included in the technical concentration. Students may take up to six credit hours of 400-level course work to broaden their technical knowledge within the concentration or supporting area. Students are required to complete six hours of EST 599 Thesis, write a thesis and hold an oral defense. All course work applied toward the minimum 33 credit hour total must be at the 400 and 500 level.
Nonthesis Option (33)
Concentration (15-18)
Supporting Area (9-12)
Research Methods Courses:
EST 500 Research/Writing (2)
EST 591 Graduate Seminar (1)
EST 593 Project (3)
Admission Requirements: Prerequisites
Applicants are required to have earned a bachelor's degree that includes a minimum of 30 credit hours or equivalent in a technology area including course work applicable to the concentration being sought, and a minimum of 16 credit hours of mathematics and science. Depending upon the background of the student, the following application materials are necessary:

- Application fee.
- Domicile affidavit for applicants claiming Arizona residency.
- Financial guarantee form (required for international students). Visit the Graduate College website for more information.
- Graduate College online application.
- Official transcripts from every college and university previously attended.
- Test score reports. The Test of English as Foreign Language (TOEFL) report may be necessary for international students. The GRE is not required by the Department of Engineering Technology.


## Contact Information:

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## Technology (Management of Technology), MSTech (TSMRMSTECH)

Online Degree Search Title: Management of Technology (MSTech) Campus: POLY

Program Description: The purpose of the M.S.Tech. with a concentration in management of technology is to prepare graduates of the program for leadership roles in technology-driven organizations, whether private or public, and to improve the leadership skills of technically proficient professionals. Students are prepared to successfully transition into leadership positions in their field of expertise and to move into a general leadership role outside their area of technical expertise as their career grows. This degree program is open to individuals with a technical undergraduate degree who wish to develop their leadership/management skills to complement their technical expertise. The course schedule is tailored to the needs of the student while ensuring that basic leadership and management skills are acquired.

Degree Requirements: 33 credit hours and a Thesis or 33 credit hours including the required course (TMC 593) and an Applied Project
It is expected that graduates of the program possess skills in research and the ability to apply these research skills in practice. To achieve this goal each student is required to complete OMT 549 Research Techniques and either TMC 593 Applied Project or TMC 599 Thesis.
Additionally, each student is required to select four courses (12 credit hours) from the following list:
OMT 503 Marketing Management
OMT 504 Law and Ethics for Technical Professionals
OMT 540 International Management
OMT 548 Statistical Methods for Research
OMT 550 Industrial Training and Development
OMT 552 Global Management Philosophies
OMT 592 Research (1-3)
TMC 584 Internship (1-3)
OMT 598 ST: Forecasting and Evolution of Technology
OMT 598 ST: Simulation of Operations
OMT 598 ST: Advanced Quality Topics
OMT 598 ST: Advanced Operations Topics
Graduate courses from other majors may be selected with approval from the student's graduate advisory committee. These additional courses are selected to support the student's individual career goals and perceived needs. If selecting the thesis option, courses are chosen to support the student's research topic and research methods. To ensure that all courses taken will fit into the plan of study, all students are expected to discuss their tentative plan with their program advisor prior to registering for their first class, and must have an approved plan of study on file by the completion of nine credit hours toward the degree.
Students without a statistics course at the undergraduate level will be required to complete an appropriate course during their first semester in the program. This course will be in addition to the other requirements for the degree. Additional courses may be required to fulfill deficiencies, based on a review of the applicant's transcripts. Please contact the department for more information.

Admission Requirements: All applicants must submit the Graduate College online application and the admission requirements include:

- Bachelor's degree or the equivalent from a regionally accredited institution.
- Equivalent to a "B" (3.00) average for the undergraduate program of study in the last 60 credit hours or 90 quarter hours of undergraduate course work. If an applicant does not meet the minimum GPA, their application may still be considered although the degree program office may require additional supporting documents.
- International applicants must meet the previous qualifications, plus have a valid minimum Test of English as a Foreign Language (TOEFL) score of 550 on the paper test or a score of 213 on the computer-based test.

The College of Science and Technology admission requirements include:

- An appropriate baccalaureate degree from an accredited college or university, with a minimum of 30 credit hours in technology or its equivalent and 16 credit hours of science and mathematics appropriate to the program pursued.
- A current resume.
- A letter of application.
- A minimum 3.00 GPA is required for regular admission.

Industrial experience beyond completion of a baccalaureate degree is strongly recommended. Graduate work presupposes an adequate technical preparation in a selected technology at the undergraduate level. Deficiencies for admission to the graduate program, if any, are specified at the time of admission. The applicant's past work and professional experience are also evaluated and taken into consideration when determining admission classification.

## Contact Information:

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## Technology (Manufacturing Engineering Technology), MSTech (TSMFMSTECH)

Online Degree Search Title: Manufacturing Engineering Technology (MSTech)
Campus: POLY

Program Description: At the graduate level, the Department of Engineering Technology offers a M.S.Tech. with a concentration in manufacturing engineering technology. M.S.Tech. students can select a technical concentration of manufacturing processes, management or computerization.
This flexible program permits the student to develop a program of study, with faculty approval, to meet individual career goals. While the program is not an evening program, many courses are offered either during the late afternoon or early evening. The program presupposes that the student has a sound technical undergraduate degree, but not necessarily in manufacturing engineering. The degree concentration is designed to provide graduates with technical and professional skills that will facilitate preparation for, and advancement in, leadership positions in industry, education, government and military. Laboratories and classrooms are well equipped, and the faculty members teaching the classes have relevant teaching, research, industry and training experience and background.

Degree Requirements: 33 credit hours and a Thesis or 33 credit hours including the required course (MET 593) and an Applied Project
All course work applied toward the minimum 33 credit hour total must be at the 400 level or higher with a grade of " B " (3.00) or higher. A maximum of six credits of 400 level coursework may be included in the student's plan of study. An oral defense of the written applied or research project (thesis) is required as the final examination in either option. This defense is typically done during the last semester of study. All course work outside the Department of Engineering Technology must be preapproved and on the plan of study.
Thesis Option
In the thesis option, a minimum of 24 credit hours must be 500-level courses, allowing students to take up to six credit hours of 400level course work to broaden their technical knowledge within the technical concentration or a supporting area. The course work may be a combination of manufacturing, mechanical or aeronautical engineering technology courses or a limited number from outside the department. Students are required to complete six credit hours of MET 599 Thesis, write a thesis and present an oral defense.
Thesis Option (33)
Technical concentration area (18)
Supporting area (6)
Research methods courses: EST 591 Research Seminar (1)
EST 500 Research Writing (2)
MET 599 Thesis (6)
Applied Project Option
In the applied project option, a minimum of 24 credit hours must be 500 -level courses, allowing students to take up to six credit hours of 400 -level course work to broaden their technical knowledge within the technical concentration or a supporting area. The course work may be a combination of manufacturing, mechanical or aeronautical engineering technology courses or a limited number from outside the department. The applied project requires a supporting report; the project and report are defended in a final oral examination.
Applied Project Option (33)
Technical concentration area (18)
Supporting area (9)

Research methods courses: EST 591 Research Seminar (1)
EST 500 Research Writing (2)
MET 593 Applied Project (3)

Admission Requirements: Applicants are expected to satisfy all requirements for admission to the Graduate College. In addition to the online application and materials required by the Graduate College, applicants are required to provide a resume and statement of purpose to the department.
Recommendation letters are not required but up to two letters will be considered. Letters of recommendation may be helpful during the admission process if the candidate's qualifications are atypical or the letters provide information not typically addressed in the required admission materials listed above. Letters of recommendation should be sent directly to the department. For more information, please contact the department or the Graduate College.
Industrial experience beyond completion of a bachelor's degree is recommended. Applicants with deficiencies in critical undergraduate technical subjects or those not meeting program prerequisites may be required to complete them before being admitted to the degree program.
Applicants who hold a bachelor's degree from a regionally accredited U.S. institution are not required to take the GRE. Applicants holding a bachelor's degree from outside the U.S. should take the GRE. If English is not the applicant's native language, the Test of English as a Foreign Language (TOEFL) examination is required.

## Contact Information:

Technology and Innovation, College of
Department of Engineering Technology
http://technology.asu.edu/engrtech
SIM 295
engrtech@asu.edu
480-727-1584

## Technology (Mechanical Engineering Technology), MSTech (TSMHMSTECH)

Online Degree Search Title: Mechanical Engineering Technology (MSTech)
Campus: POLY
Program Description: At the graduate level, the Department of Engineering Technology offers a M.S.Tech. with a concentration in mechanical engineering technology.
This flexible degree program permits the student to develop a program of study, with faculty approval, to meet individual career goals. While the program is not an evening program, many courses are offered either during the late afternoon or early evening. The program presupposes that the student has a sound technical undergraduate degree, but not necessarily in mechanical engineering. The degree concentration is designed to provide graduates with technical and professional skills that will facilitate preparation for, and advancement in, leadership positions in industry, education, government and military. Laboratories and classrooms are well equipped, and the faculty members teaching the classes have relevant teaching, research, industry and training experience and background.
Research Activity
Department faculty are engaged in both theoretical and applied research projects, involving undergraduate and graduate students in mechanical-related topic areas. Graduate students employed in local industry are encouraged to develop research topics that address problems of interest to their employers.
Current research interests of the faculty include:

- Automation and design.
- Composite materials.
- Hydrogen power, fuel cells and other alternative energy sources.
- Optimization of turbine engines.
- Machinability and manufacturing processes.
- Manufacturing.
- Manufacturing cost economics.
- Modeling and simulation.
- Mechanics education.
- Program management.
- "Smart" materials.

Applied research projects are carried out in a number of well-equipped laboratories and facilities:

- Automation laboratory.
- Computer numerical control (CNC) machining center laboratory.
- Composite materials laboratory.
- Computer-aided design and computer-aided manufacturing laboratory.
- Energy conversion and combustion laboratory.
- Materials inspection and metrology laboratory.
- Metallurgy/materials testing laboratory.
- Welding and casting laboratory.

For more information on research areas and laboratories, please access the Department of Engineering Technology website.
Degree Requirements: 33 credit hours and a Thesis or 33 credit hours including the required course (MET 593) and an Applied Project
All course work applied toward the minimum 33 credit hour total must be at the 400 level or higher with a grade of " B " (3.00) or higher. A maximimum of six credit hours of 400 level coursework may be included on the student's plan of study. An oral defense of the written applied or research project (thesis) is required as the final examination in either option. This defense is typically done during the last semester of study. All course work outside the Department of Engineering Technology must be pre-approved and on the plan of study.
Thesis Option
In the thesis option, a minimum of 24 credit hours must be 500-level courses, allowing students to take up to six credit hours of 400level course work to broaden their technical knowledge within the technical concentration or the supporting area. The course work may be a combination of manufacturing, mechanical or aeronautical engineering technology courses or a limited number from outside the department. Students are required to complete six credit hours of MET 599 Thesis, write a thesis and present an oral defense.
Thesis Option (33)
Technical concentration area (18)
Supporting area (6)
Research methods courses: EST 591 Research Seminar (1)
EST 500 Research Writing (2)
MET 599 Thesis (6)
Applied Project Option
In the applied project option, a minimum of 24 credit hours must be 500 -level courses, allowing students to take up to six credit hours of 400-level course work to broaden their technical knowledge within the technical concentration or the supporting area. The course work may be a combination of manufacturing, mechanical or aeronautical engineering technology courses or a limited number from outside the department. The applied project requires a supporting report; the project and report are defended in a final oral examination.
Applied Project Option (33)
Technical concentration area (18)
Supporting area (9)
Research methods courses: EST 591 Research Seminar (1)
EST 500 Research Writing (2)
MET 593 Applied Project (3)
Admission Requirements: Applicants are expected to satisfy all requirements for admission to the Graduate College, including the online application. In addition to the materials required by the Graduate College, applicants are required to provide a resume and statement of purpose to the department.
Recommendation letters are not required but up to two letters will be considered. Letters of recommendation may be helpful during the admission process if the candidate's qualifications are atypical or the letters provide information not typically addressed in the required admission materials listed above. Letters of recommendation should be sent directly to the department. For more information, please contact the department or the Graduate College.
Industrial experience beyond completion of a baccalaureate degree is recommended. Applicants with deficiencies in critical undergraduate technical subjects or those not meeting program prerequisites may be required to complete them before being admitted to the degree program.

## Contact Information:

Technology and Innovation, College of
Department of Engineering Technology
http://technology.asu.edu/engrtech
SIM 295
engrtech@asu.edu
480-727-1584

## Undergraduate Programs

## Minors (Program Descriptions and Requirements)

## African and African American Studies Minor (LAAFRMIN)

Campus: TEMPE

Description: The African and African American Studies Program offers an interdisciplinary examination of the many ways in which African and African-descended peoples have created robust lives for themselves and, in turn, contributed to the creation of the modern world.
The program's mission is advanced by its core undergraduate curriculum and certificate and minor programs that examine the culture, arts, history, politics, economics and current status of African Americans, Africans and the African Diaspora everywhere, especially in the Caribbean, Central America and South America.
The curriculum combines a research-based understanding of the humanities, social and behavioral sciences and the arts with practical applications (internships, community/civic engagement and research projects) to prepare students for lifelong learning, advanced study in a variety of fields and successful careers and productive public service in an increasingly diverse society, especially in Arizona.

Program Requirements: Students will be required to complete 18 credit hours. Six credits will be prescribed core and the remaining 12 elective credit hours will be selected from any of the AAAS prefixes (AFH, AFR, AFS).
Required Core Course: AFS 200 Introduction to African and African Diaspora Studies (3)
Elective Core Course: 3 credits
AFH 300: Precolonial Africa (3)
AFH 305: Global History of the Trans-Atlantic Slave Trade (3)
AFS 301: Race and Racism in Africa/African Diaspora (3)
AFS 302: History of Black Women (3)
Elective Courses: The remaining 12 hours will be completed by selecting courses not taken to fulfill the six required hours and will be selected from any of the unit prefixes (AFH, AFR, AFS).
At least 12 of the 18 credit hours must be upper division courses ( 300 or higher). All courses must have a " C " (2.00) grade or higher. No course may be used to satisfy more than one requirement in the minor.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2 ) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://aaas.clas.asu.edu
WILSN 140
aframstu@asu.edu
480-965-4399

## American Indian Studies Minor (LAAISMIN)

Campus: TEMPE

Description: The minor in American Indian studies is designed for students interested in developing an understanding of American Indian issues and analyzing issues through critical inquiry.

Program Requirements: Eighteen credit hours are required, including AIS 180, 285, 380 and three additional upper division courses. No pass/fail or credit/noncredit course work may be applied to the minor. A minimum of nine hours must be in-resident credit at the Tempe campus. Students must receive a minimum grade of "C" (2.00 on a scale of 4.00) for all courses in the minor and meet all course eligibility requirements.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of
American Indian Studies Program
http://americanindian.clas.asu.edu/
DHALL 356
AIS@asu.edu
480-727-7056

## American Studies Minor (ASAMSMIN)

## Campus: WEST

Description: The American studies minor offers students the opportunity to pursue an interest in the interdisciplinary study of American culture. This interdisciplinary minor is particularly appropriate for students majoring in one of the humanities or social sciences disciplines.

Program Requirements: The American studies minor consists of 18 credit hours, 12 of which must be upper-division (300-400 level). The following courses are required (6):
AMS 301 Introduction to American Studies, L (3)
AMS 330 Introduction to American Lives, HU (3)
Choose from the following combinations (6):
AMS 310 History of American Systems to 1865, L, C, H (3)
AMS 311 History of American Systems since 1865, H (3)
or
AMS 320 American Cultural History I, SB, H (3)
AMS 321 American Cultural History II, SB, H (3)
Supporting Courses (6):
Two courses with substantial American content that must be approved by the American Studies advisor.
Enrollment Requirements: Students wishing to pursue the American studies minor should consult an academic advisor in the unit offering that minor to ensure that the appropriate set of courses is taken. The student should also consult with an academic advisor in the college, division or department of his or her major to ensure they recognize the minor, and to have the minor added to the program of study.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Please contact the division for more information. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of

Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/minors/americanstudies
FAB N201
harcs.dept@asu.edu
602-543-4444

## Anthropology Minor (LAASBMIN)

## Campus: TEMPE

Description: The minor in anthropology provides students with a great deal of flexibility in selecting courses. The program has been designed to allow students to focus on areas within the discipline that articulate well with their major. All students interested in the anthropology minor are encouraged to discuss the options available with a School of Human Evolution and Social Change undergraduate advisor.

Program Requirements: The anthropology minor requires a minimum of 18 credit hours.
Two of the introductory courses from ASB 102, ASM 104 and ASB 222 (or 223 ) are required. However, the particular introductory courses selected may limit the anthropology courses available in the upper division.
Twelve credit hours must be upper-division and represent at least two of the three subfields of anthropology.
The three subfields are:

- Archaeology.
- Physical anthropology.
- Sociocultural anthropology (with linguistics).

The courses chosen to represent two of the three subfields must be drawn from the distribution requirements of those two subfields.
A minimum grade of " $C$ " (2.00 on a scale of 4.00 ) is required for all courses taken for the minor in anthropology.
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of School of Human Evolution \& Social Change
http://shesc.asu.edu/degree-ug
SHESC 233
shesc.undergrad@asu.edu
480-965-6215

## Applied Biological Sciences Minor (TSABSMIN)

Campus: POLY
Description: Applied Biological Sciences offers rigorous and practical programs in applications of the biological sciences. Consistent with a polytechnic vision, this minor involves extensive student interaction with faculty through experience-based learning activities, including:

- Faculty-guided research and service-learning projects.
- Field trips.
- Internships.
- Laboratories.

Mastery of fundamental biological principles is emphasized through quality learning in the classroom and hands-on activities in laboratories and in the living laboratories of the Sonoran desert and surrounding ecosystems (as well as the landscape of the greater Phoenix area).

Program Requirements: The applied biological sciences minor consists of 23 credit hours, including BIO 181 General Biology I and BIO 182 General Biology II, and at least 15 hours selected with the approval of an advisor; at least 9 hours must be in upper-division courses offered by the Applied Biological Sciences program.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

## Contact Information:

Technology and Innovation, College of
Department of Applied Sciences and Mathematics
http://technology.asu.edu/dasm
SANTN 330
technology@asu.edu
480-727-1874

## Applied Psychology Minor (ECPSYMIN)

## Campus: DTPHX

Description: Applied psychology offers a traditional psychology core curriculum with emphasis on human factors, human-computer interaction, aviation or manufacturing.

Program Requirements: This minor in applied psychology consists of 22 credit hours with at least 12 being upper-division courses. The following are required courses that must be completed with a grade of " $C$ " $(2.00)$ or higher:
PGS 101 Introduction to Psychology, SB (3)
PSY 230 Introduction to Statistics, CS (3)
PSY 290 Research Methods, L/SG (4)
PSY 437 Human Factors, L (3) or PSY 438 Human-Computer Interaction* (3) or PSY 440 Industrial/Organizational Psychology* (3)
Additional hours of upper-division PSY and/or PGS courses (9).
A maximum of three credit hours from the following courses can be used toward the minor requirements:
PGS 399 Supervised Research (3)
PGS 499 Individualized Instruction (3) or PSY 499 Individualized Instruction (3)
PSY 492 Honors Directed Study (3)
A minimum of three classes (two of which are in the upper division) must be taken in residence at ASU.
*This PSY course is offered only at the Polytechnic campus. Additional PSY and PGS courses are offered at the Polytechnic, Tempe, Downtown Phoenix and West campuses.

Enrollment Requirements: Please contact the department for more information.

## Contact Information:

Technology and Innovation, College of
Faculty of Applied Psychology
http://technology.asu.edu/appliedpsych
SANTN 330
technology@asu.edu
480-727-1874

## Arabic Studies Minor (LAARBMIN)

Campus: TEMPE

Description: The minor in Arabic studies provides students with instruction in Modern Standard Arabic (MSA), as well as Arabic culture and literature. Students who successfully complete the prescribed course work of the Arabic minor are expected to be able to communicate effectively in Arabic and interact with native speakers of Arabic in MSA. Students will be able to communicate in Arabic in the other two areas of language acquisition: reading and writing through reading authentic material in Arabic, and writing paragraphs in MSA. Literature courses expand students' knowledge in Arabic, Middle East, and Islamic culture and civilization. Students of all academic disciplines doing research on, or seeking employment in, areas related to the Middle East or parts of the Arab world will find the minor in Arabic highly beneficial. Students should work with their undergraduate advisor as well as Arabic advisors in declaring the minor in Arabic studies by their junior year.

Program Requirements: The minor in Arabic studies requires 26 credit hours of courses detailed below. A minimum grade of " C " (2.00) or better is required in each course.

ARB 201 and ARB 202 Intermediate Arabic I and II (8)
ARB 311 Advanced Arabic Skills I (3)
ARB 411 Advanced Arabic Skills II (3)
ARB 351 Classical Arabic Literature (3)
ARB 331 Arabic Islamic Culture and Literature (3)
ARB 341 Quran Text and Women (3)
Any upper-division course of the following (3):
ARB 321 Arabic Conversation I
ARB 335 Arabic Culture and Islam
ARB 421 Arabic Conversation II
HST 372 Modern Middle East
REL 365 Islamic Civilization
REL 366 Islam in the Modern World
Students must complete the sequence of elementary Arabic, ARB 101 and ARB 102, as prerequisite courses.
Enrollment Requirements: Students wishing to pursue the Arabic studies minor should consult an academic advisor in the unit offering that minor to ensure that the appropriate set of courses is taken. The student should also consult with an academic advisor in the college, division or department of his or her major to make sure they recognize the minor, and to have the minor added to the program of study.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Please contact the division for more information. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/
LL 440
silc@asu.edu
480-965-6281

## Architectural Studies Minor (ARSTDMIN)

Campus: TEMPE
Description: The architectural studies minor is available to non-architecture majors interested in this field who wish to pursue another major. The courses are designed to provide an overview of architecture throughout history while focusing on architectural design, with the intention to explore the process of design thinking.

Program Requirements: A minimum of 18 credit hours (to include 12 credit hours of upper-division course work) are required for the minor.
Required Courses:
ALA 100 Introduction to Environmental Design, HU, G, H (3)
ALA 102 Architecture, Landscape Architecture, and Society HU, G (3)

APH 313 History of Architecture I, L/HU, G, H (3)
APH 314 History of Architecture II, L/HU, G, H (3)
Six additional upper-division credit hours of electives in the architectural history and theory concentration must be selected from the following list:
ANP 494 Special Topics (1-3)
APH 305 Contemporary Architecture (3)
APH 394 Special Topics (3)
APH 346 20th-Century Architecture I, HU (3)
APH 347 20th-Century Architecture II, HU (3)
APH 414 History of the City, H (3)
APH 441 Ancient Architecture (3)
APH 444 Baroque Architecture (3)
APH 494 Culture of Place, C (3)
APH 494 Special Topics (6)
APH 499 Individualized Instruction* (3)
APH 511 Energy Environmental Theory (3)
APH 598 Special Topics (3)
ARP 451 Architectural Field Studies (6)
ATE 598 Special Topics (3)

* This course requires a petition to the School of Architecture and Landscape Architecture.

A minimum GPA of 2.50 in minor courses is required to earn the minor in architectural studies. In addition, students may not use a core course to count toward the minor. Students pursuing the B.S. in landscape architecture must petition the school to request a substitution for any core courses that are also included in the architectural studies minor.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major.

## Contact Information:

Design and the Arts, Herberger Institute for
The Design School
http://herbergerinstitute.asu.edu/degrees/sala.php
CDN 162
herbergeradvising@asu.edu
480-965-3536

## Art History Minor (FAARTHMIN)

Campus: TEMPE

Description: The art history minor is designed for those students who are interested in a broad introduction to the study of the history of art. In giving a broad chronological exposure to the history of art from diverse cultures, the minor strengthens academic preparation and provides students with many options to select courses based on their individual interests.

Program Requirements: The School of Art offers a minor in art history consisting of 18 credit hours of course work, including 12 upper-division electives. A minimum grade of "C" 2.00 ) is required in all classes in the minor. For those pursuing a minor, a minimum overall GPA of " $C$ " $(2.00)$ is required. Courses may not be double counted in a major and the minor, and a minimum of 12 credit hours of resident credit at the Tempe campus are required.
ARS 100 or 300 may be used toward a minor. ARS 100 and 300 may not be used toward an art history minor if the student is an art major or has credit in ARS 101 and 102.
Required Courses

Select two of the following courses:

ARS 101 Art from Prehistory Through Middle Ages, HU, H (3)
ARS 102 Art from Renaissance to Present, HU, H (3)
or
ARS 201 Art of Asia, HU, G, H (3)
ARS 202 Art of Africa, Oceania and the Americas, HU, G, H (3)

## Elective Courses

Students pursuing an art history minor select four three-credit-hour, upper-division courses. A seminar is strongly recommended for those considering graduate study.
Students need to be aware of lower-division prerequisites for all upper-division courses. Interested students should contact the School of Art for specific requirements and admission procedures.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor. Please contact the department for more information.
Note: certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
ART 102
herbergeradvising@asu.edu
480-965-3468

## Asian Languages (Chinese) Minor (LACHIMIN)

Campus: TEMPE
Description: Students pursuing a minor in Asian languages (Chinese) gain an understanding of the language, literature and cultures of China. There are opportunities to partake in study abroad programs, which can serve to enhance a student's minor experience and education.

Program Requirements: The minor in Asian languages (Chinese) consists of 18 credit hours, of which 12 credit hours must be at the upper division. Required courses are:

- Up to six credit hours of 200-level Chinese.
- CHI 301 Third-Year Chinese I (5).
- CHI 302 Third-Year Chinese II (5).
- Two credit hours of CHI course work chosen in consultation with the advisor in the School of International Letters and Cultures.

Course substitutions are allowed for heritage and advanced speakers of the language.
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
LL 440
silcadvising@asu.edu
480-965-6281

## Asian Languages (Japanese) Minor (LAJPNMIN)

## Campus: TEMPE

Description: Students pursuing a minor in Asian languages (Japanese) gain an understanding of the language, literature, and cultures of Japan. There are opportunities to partake in study abroad programs, which can serve to enhance a student's minor experience and education.

Program Requirements: The minor in Asian languages (Japanese) consists of 18 credit hours, of which 12 credit hours must be at the upper division. Required courses are:

- JPN 301 Third-Year Japanese I, G (3).
- JPN 302 Third-Year Japanese II, G (3).
- Six credit hours of additional upper-division JPN courses chosen in consultation with a School of International Letters and Cultures advisor.
- Up to six credit hours in 200-level JPN courses.

Course substitutions are allowed for heritage and advanced speakers of the language.
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2 ) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
LL 440
silcadvising@asu.edu
480-965-6281

## Asian Pacific American Studies Minor (LAAPAMIN)

Campus: TEMPE

Description: The Asian Pacific American Studies (APAS) minor is an interdisciplinary undergraduate program option that will allow students interested in complementing a degree with the study of demographic, cultural, social, economic and policy issues that have
shaped and continue to affect Asian American and Pacific Islander (AAPI) communities in Arizona, the Southwest U.S., nationally and internationally. This minor will target students interested in careers serving and relating to the complex and rapidly changing AAPI population and more broadly with culturally diverse populations.
For example, an APAS minor could be paired with majors involving business, law, immigration, community organizing, journalism, health or creative arts. Students interested in issues of diversity, multicultural relations, race, gender, class, and global and local engagement with diverse, migrant and diasporic populations and peoples will benefit from earning the APAS minor. In addition, one option for students enrolled in the minor is to enroll in a community-based internship; this provides a chance to learn more about local Asian Pacific American organizations and communities and to apply what they have learned in course work to specific community contexts.

Program Requirements: Students will be required to complete 18 credit hours for the minor. Six hours will be a prescribed core and the remaining 12 elective hours will be selected from any of the courses with an APAS prefix.
Required Core Course (6)

APA 200 Introduction to Asian Pacific American Studies
APA 360 Asian Pacific American Experience

Elective Courses (12)
The remaining 12 credit hours will be completed by selecting courses not taken to fulfill the 6 required hours and will be selected from any APAS courses.

APA 210 Introduction to Ethnic Studies in the U.S.
APA 310 Asian Pacific American Arts and Cultures
APA 315 Asian Pacific American Literature
APA 330 Asian Pacific American Genders and Sexualities
APA 340 Asian Pacific Americans and Media
APA 345 Asian Pacific Americans and Film
APA 360 Asian Pacific American Experience
Note: one APA 360 course is required for the core; other sections may be repeated for credit with different topics.

- The Chinese American experience.
- The Japanese American experience.
- The Filipina/o American experience.
- The Korean American experience.
- The Pacific Islander experience.
- The South Asian experience.
- The Southeast Asian experience.
- The Multi-Racial experience.
- Asian American psychology.

APA 394 Special Topics (may be repeated for credit with a different topic)
APA 450 Asian Pacific American Contemporary Issues
APA 484 Asian Pacific American Community Internship
APA 494 Special Topics (may be repeated for credit with a different topic)
APA 499 Individualized Instruction (1-3 credits, may be repeated for credit)

## Other Requirements and Restrictions

- At least 12 of the 18 credit hours must be upper division courses ( 300 or higher).
- All courses for the minor must have a " $C$ " (2.00) grade or higher.
- A minimum of 9 credit hours must be taken in residency at ASU.
- No course may be used to satisfy more than one requirement in the minor.


## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://apas.clas.asu.edu
WILSN 342

## Astronomy Minor (LAASTMIN)

Campus: TEMPE

Description: The astronomy minor is designed for students interested in developing a basic understanding of astronomy and astrophysics and analyzing issues through a scientific viewpoint.

Program Requirements: The minor in astronomy consists of a minimum of 24 credit hours. At least 12 credit hours must in upperdivision courses. Required courses:
AST 113 Astronomy Laboratory I, SQ (1)*
AST 114 Astronomy Laboratory II, SQ (1)**
AST 321 Introduction to Planetary and Stellar Astrophysics, SQ (3)*
AST 322 Introduction to Galactic and Extragalactic Astrophysics, SQ (3)**
Choose between the course combinations below:
PHY 150 Physics I, SQ (4) or
PHY 121 University Physics I: Mechanics, SQ (3)*** and PHY 122 University Physics Laboratory I SQ (1)***
and
PHY 151 Physics II, SQ (4) or
PHY 131 University Physics II: Electricity and Magnetism, SQ (3)**** and PHY 132 University Physics Laboratory II SQ (1)**** or

PHY 252 Physics III, SQ (4)
Eight credit hours of electives are chosen with approval of an astronomy advisor from upper division courses in physics and astronomy.
*Both AST 113 and 321 must be taken to secure SQ credit.
**Both AST 114 and 322 must be taken to secure SQ credit.
***Both PHY 121 and 122 must be taken to secure SQ credit.
****Both PHY 131 and 132 must be taken to secure SQ credit.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 2) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
All students will be required to meet with an academic advisor in the School of Earth and Space Exploration (SESE) to declare the minor and confirm that the requirements are being met. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows recognition of the minor. The DARS system will be used for tracking student progress and verifying completion of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which courses in the minor are simultaneously being used to fulfill core requirements of the student's major.

## Contact Information:

Liberal Arts and Sciences, College of School of Earth and Space Exploration
http://sese.asu.edu
PS F686
seseinfo@asu.edu
480-965-5081

## Astrophysics Minor (LAASTPHMIN)

## Campus: TEMPE

Description: The astrophysics minor is designed for students interested in developing a background in the theoretical modeling and observational techniques of galactic and stellar astronomy, extragalactic astronomy and cosmology. Students completing the minor will acquire the ability to think critically about scientific problems, to reduce complex problems to their most important attributes,
and to design experiments, observations and/or theoretical models to address those attributes. Students pursuing an astrophysics minor are expected to have a strong background in physics and mathematics.

Program Requirements: The minor in astrophysics consists of a minimum of 20 credit hours.
The following courses are required for the minor, adding up to 12 credit hours.
AST 321 Intro to Planetary and Stellar Astrophysics (3)
AST 322 Intro to Galactic and Extragalactic Astrophysics (3)
AST 421 Astrophysics I (3)
AST 422 Astrophysics II (3)
Students must also choose one of the following options for the additional 8 credit hours
Option 1:
SES 101 Earth / Solar System / Universe I (3)
SES 102 Earth / Solar System / Universe Lab I (1)
SES 103 Earth / Solar System / Universe II (3)
SES 104 Earth / Solar System / Universe Lab II (1)
Option 2:
AST 111 Intro Solar System Astronomy (3)
AST 113 Astronomy Laboratory I (1)
AST 112 Intro Stars Galaxies \& Cosmology (3)
AST 114 Astronomy Laboratory II (1)

Option 3:
At least 8 credit hours of SES or AST upper division electives; these may include (but are not limited to):
AST 494 Astrophysics Seminar (1)
SES 311 Essentials of Astrobiology (3)
AST/SES 494/598 Astronomical Instrumentation and Data Analysis (3)
Enrollment Requirements: All students will be required to meet with an academic advisor in the School of Earth and Space Exploration (SESE) to declare the minor and confirm that the requirements are being met. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor. The DARS system will be used for tracking student progress and verifying completion of the minor. Minimum Residency Requirement
Students must take at least 12 of the 20 units required for the minor at ASU. Transfer coursework must be evaluated by a SESE advisor before it can be applied toward the minor requirements.
The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met. The college (and, in certain colleges, the department) of the student's major allows recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which courses in the minor are being used to fulfill CORE requirements of the student's major.

## Contact Information:

Liberal Arts and Sciences, College of School of Earth and Space Exploration
http://sese.asu.edu
PSF 686
seseinfo@asu.edu
480-965-5081

## Biochemistry Minor (LABCHMIN)

Campus: TEMPE
Description: The biochemistry minor is designed to give students majoring in other disciplines a solid grounding in the basics of biochemistry in order to complement their major degree. It is especially appropriate for majors in the various disciplines of life sciences, physics, engineering and geology, and for students planning careers in medical disciplines.

Program Requirements: A minor in biochemistry is awarded to students who complete at least 25 credit hours in the following required courses:
BCH 461 General Biochemistry (3)
BCH 462 General Biochemistry (3)
CHM 113 General Chemistry I, SQ (4)
CHM 116 General Chemistry II, SQ (4)
CHM 233 General Organic Chemistry I (3)
CHM 234 General Organic Chemistry II (3)
CHM 237 General Organic Chemistry Laboratory I (1)
CHM 238 General Organic Chemistry Laboratory II (1)
CHM 341 Elementary Physical Chemistry (3) or CHM 345 Physical Chemistry I (3)
A minimum grade of " $C$ " ( 2.00 on a scale of 4.00 ) is required for each of the courses. A minimum of 12 upper division credit hours are required to complete this minor, so the student may need to complete an additional three hours $\mathrm{BCH} / \mathrm{CHM}$ elective.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2 ) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major.
Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Chemistry and Biochemistry
http://chemistry.asu.edu
PS D102
chmugadv@asu.edu
480-965-3461

## Biological Sciences Minor (LABIOMIN)

Campus: TEMPE

Description: Biological sciences encompasses the study of all living things and includes the study of basic organization and function, how organisms evolve, their roles in the natural environment, how hereditary information is transferred and the development of biotechnology. The Biological Sciences Minor is designed to provide students interested in the biological sciences with a flexible curriculum that can be tailored to their interests.

Program Requirements: The minor consists of 24 credit hours which can be taken in one of two options.
Option 1 consists of BIO 181 General Biology I or PLB 200/201 Biology of Plants/Lab, BIO 182 General Biology II, BIO 340 General Genetics, and BIO 345 Organic Evolution.
Option 2 consists of MBB 245 Principles of Molecular and Cellular Biology I, MBB 247 Principles of Molecular and Cellular Biology II, MIC 220 Biology of Microorganisms and MIC 206 Microbiology Lab, and BIO 340 General Genetics.
The remaining hours are selected by the student with the approval of a School of Life Sciences advisor.
Notes:

- At least 12 hours must be upper division courses in the life sciences.
- Courses which are not available for credit in the Life Sciences majors cannot be used for the minor (e.g. BIO 100 The Living World, BIO 201 Human Anatomy and Physiology I, and BIO 202 Human Anatomy and Physiology II).
- Internship courses are not accepted as fulfilling the 24 credit hour requirement.
- This minor is not available to students majoring in the life sciences.

Enrollment Requirements: This minor is not available to students majoring in the life sciences. Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2 ) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/
LSC 206
sols.advising@asu.edu
480-727-6277

## Business Minor (BABUSMIN)

Campus: TEMPE

Description: A minor in business is available to students across the university interested in business courses, but who wish to pursue majors in other colleges. The business minor includes a strong business foundation covering topics that are important to managers such as:

- Accounting.
- Computer information systems.
- Economics.
- Finance.
- Management.
- Marketing.

Program Requirements: Students must complete 36 credit hours of the specified business courses with a grade of " $C$ " (2.00) or higher in each course. Six of the 12 upper-division credit hours must be resident credit. The upper-division courses specified for the minor will be restricted to students with 56 earned credit hours, a minimum 2.50 ASU cumulative GPA and course prerequisite requirements met. Business students are not eligible to apply for the minor.
Lower-Division Courses (24)
ACC 231 Uses of Accounting Information I or ACC 303 Honors Financial Accounting
ACC 241 Uses of Accounting Information II
CIS 105 Computer Applications and Information Technology or other approved computer science/information course
ECN 211 Macroeconomic Principles
ECN 212 Microeconomic Principles
ECN 221 Business Statistics (or other approved statistics course)
MAT 210 Brief Calculus or MAT 270 Calculus with Analytical Geometry I
MAT 211 Mathematics for Business Analysis or MAT 271 Calculus with Analytical Geometry II

Upper-Division Courses (12 credit hours, six of which must be taken from the W. P. Carey School of Business)
FIN 300 Fundamentals of Finance or FIN 302 Managerial Finance or FIN 303 Honors Finance
MGT 300 Organization and Management Leadership or MGT 303 Honors Organizational
Strategies, Leadership and Behavior
MKT 300 Marketing and Business Performance or MKT 302 Applied Marketing Management and Leadership or MKT 303 Honors Marketing Theory and Practice
SCM 300 Global Supply Operations or SCM 303 Honors Global Supply Chain Operations
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or
department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Business, W. P. Carey School of
Dean, W.P. Carey School of Business
http://wpcarey.asu.edu/undergraduate/current-students/academics/current-catalogs.cfm
BA 109
wpcareyug@asu.edu
480-965-4227

## Chemistry Minor (ASCHMMIN)

## Campus: WEST

Description: The minor in chemistry gives students expanded proficiency in the area of chemistry. Many of the growing career fields, such as forensics, medicine and environmental quality, are requiring a greater degree of chemistry than in the past. Therefore, students with a greater chemistry background will have a competitive advantage in these fields. The chemistry minor gives students more experience in the advanced and integrative fields of chemistry through additional biochemistry and analytical chemistry courses. The awarding of the chemistry minor highlights the students expanded chemistry knowledge to future schools and employers.

Program Requirements: The minor in chemistry consists of a minimum of 25 credit hours, of which nine credit hours must be taken in the life sciences department.
Required Courses ( 25 credit hours)
CHM 113 General Chemistry I
CHM 116 General Chemistry II
CHM 233 Organic Chemistry I
CHM 233 Organic Chemistry II
CHM 237 Organic Chemistry Laboratory I
CHM 237 Organic Chemistry Laboratory II
CHM 327 Instrumental Analysis
CHM 328 Instrumental Analysis Laboratory
BCH 361 Principles of Biochemistry
LSC 366 Elementary Biochemistry Laboratory
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Please contact the division for more information. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Mathematical and Natural Sciences
http://www.newcollege.asu.edu/programs/math_sci/

## Chemistry Minor (LACHMMIN)

## Campus: TEMPE

Description: The chemistry minor is designed to give students majoring in other disciplines a solid grounding in the basics of chemistry in order to complement their major degree. It is especially appropriate for majors in the various disciplines of physics, materials science, geology, engineering and life sciences.

Program Requirements: A minor in chemistry is awarded to students who complete a minimum 24 credit hours. The following courses are required:
CHM 113 General Chemistry I, SQ (4)
CHM 116 General Chemistry II, SQ (4)
CHM 325 Analytical Chemistry (3)
CHM 326 Analytical Chemistry Laboratory (1)
Choose between the course combinations (8 credit hours):
BCH 361 Principles of Biochemistry (3)
BCH 367 Elementary Biochemistry Laboratory (1)
CHM 231 Elementary Organic Chemistry, SQ (3)
CHM 235 Elementary Organic Chemistry Laboratory, SQ (1)
or
CHM 233 General Organic Chemistry I (3)
CHM 234 General Organic Chemistry II (3)
CHM 237 General Organic Chemistry Laboratory I (1)
CHM 238 General Organic Chemistry Laboratory II (1)
Choose between the course combinations below ( 4 or 8 credit hours):
CHM 341 Elementary Physical Chemistry (3)
CHM 343 Physical Chemistry Laboratory (1)
or
CHM 345 Physical Chemistry I (3)
CHM 346 Physical Chemistry II (3)
CHM 348 Physical Chemistry Laboratory I (1)
CHM 349 Physical Chemistry Laboratory II (1)
A minimum grade of " $C$ " ( 2.00 on a scale of 4.00 ) is required for each of the courses in the minor. A minimum of 12 upper division credit hours are required to complete this minor. Therefore, students who choose some options above must complete additional upper division CHM electives.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information: http://chemistry.asu.edu/undergrad/programIntro.asp.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Chemistry and Biochemistry
http://chemistry.asu.edu
PS D102
chmugadv@asu.edu

## Communication Minor (HSCMNMIN)

Campus: WEST
Description: The communication minor offers students the opportunity to understand the role and function of communication in cultural, public, organizational and relational contexts. The program offers a flexible set of courses and is designed for students majoring in another field. A maximum of six credit hours are allowed from lower-division course work.

Program Requirements: The minor consists of 18 credit hours of communication courses. Students wishing to pursue a minor must meet with a communication advisor to construct a minor that reflects a particular area of specialty and interest. At least 12 credit hours must come from upper-division courses. To graduate with the minor, students must earn a minimum cumulative GPA of 2.00 in communication courses. All courses must be passed with a minimum grade of "C" (2.00).

Enrollment Requirements: The minor in communication is open to all undergraduate majors. A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor. Please contact the division or visit the website for more information. Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/communication
FAB S105
SBS.Dept@asu.edu
602-543-6058

## Communication Minor (LACOMMIN)

Campus: TEMPE
Description: The minor in communication focuses on teaching students how communication processes create, maintain and transform identities, relationships, workplaces and communities.
Our mission statement is, "through the study and critique of human communication, we generate knowledge, creativity and understanding to facilitate healthy relationships and workplaces, civil and secure communities and constructive intercultural interaction."

Program Requirements: The minor in communication consists of 18 credit hours of courses:
COM 100 Introduction to Human Communication (3)
COM 225 Public Speaking (3) or COM 259 Communication in Business and the Professions (3)
Two of the following courses (6):
COM 310 Relational Communication (3)
COM 312 Communication, Conflict, and Negotiation (3)
COM 316 Gender and Communication (3)
COM 323 Communication Approaches to Popular Culture (3)
Two upper-division-related courses in Global Studies, Asian Pacific American Studies, African and African American Studies, Chicana/Chicano Studies or American Indian Studies (6)

Nine of the 18 credit hours must be Tempe campus resident credits. No pass/fail, $Y$ credit or credit/no-credit courses are allowed. Communication courses required for one's major may not also count for the minor. All prerequisite and GPA requirements must be met. The " $C$ " (2.00) minimum grade requirement must be met for each class.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have
been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information: http://www.asu.edu/clas/communication/undergraduate/programinfo/minor/.

## Contact Information:

Liberal Arts and Sciences, College of
Hugh Downs School of Human Communication
http://humancommunication.clas.asu.edu/
STA 412
communication@asu.edu
480-965-5095

## Computational Mathematical Sciences Minor (LACMSMIN) <br> Campus: TEMPE

Description: The computational mathematical sciences curriculum strives to provide students with a background in computer science and the natural or physical sciences in addition to a core of course work in mathematics.

Program Requirements: The minor in computational mathematical sciences consists of a minimum of 18 credit hours. Required courses are the following, for a total of 18-20 credit hours:
MAT 271 Calculus with Analytic Geometry II MA (4) or MAT 266 Calculus for Engineers II (3)
MAT 272 Calculus with Analytic Geometry III MA (4) or MAT 267 Calculus for Engineers III (3)
MAT 342 Linear Algebra (3) or MAT 343 Applied Linear Algebra (3)
MAT 420 Scientific Computing (3)
MAT 421 Applied Computational Methods CS (3)
MAT 423 Numerical Analysis I CS (3) or MAT 425 Numerical Analysis II CS (3)
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2 ) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the deparment for more information and see http://math.asu.edu/undergraduate/degrees.html.

## Contact Information:

Liberal Arts and Sciences, College of
School of Mathematical and Statistical Sciences
http://math.asu.edu/
PSA 211
math@asu.edu
480-965-7195

## Criminology and Criminal Justice Minor (PPCRJMIN)

Campus: DTPHX

Description: The minor in criminology and criminal justice allows students in other undergraduate programs at ASU to explore issues of crime, law and the criminal justice system. The minor provides students with the tools to analyze complex issues and policies within the criminal justice system, enhancing students' ability to understand the nature of crime and the system response to law breaking. In addition to the three required courses, which provide a solid understanding of the field, each student will be able to select electives to meet his or her specific interests. Criminal justice majors cannot earn a minor in criminal justice.

Program Requirements: Students are required to:

- Be, at minimum, junior standing to take upper division courses.
- Complete CRJ 100 as the prerequisite for all upper division CRJ courses.
- Complete a minimum of eighteen (18) credit hours of graded classroom/online course work (internship or independent study not applicable).
- Complete a minimum of twelve (12) credit hours of CRJ resident credit at ASU.
- Earn a grade of "C" (2.00) or higher for all classes in the minor.
- Meet with a Criminal Justice advisor prior to registration.
- Take a minimum of twelve (12) credit hours of upper division CRJ course work from the approved list.

Required Core Courses (9)
CRJ 100 Introduction to Criminal Justice (3)

Choose one of the following:

CRJ 201Criminal Justice Crime Control Policies and Practice (3)
CRJ 203 Courts and Sentencing (3)
CRJ 204 Juvenile Justice (3)
CRJ 225 Introduction to Criminology (3)
CRJ 230 Introduction to Policing (3)
CRJ 240 Introduction to Corrections (3)
Choose one of the following:
CRJ 305 Gender, Crime \& Criminal Justice (C) (3)
CRJ 306 Race, Ethnicity, Crime and Criminal Justice (C) (3)
CRJ 350 Law and Social Control (SB) (3)
CRJ 410 Procedural Criminal Law (3)
Electives (9)
Choose any three additional upper division CRJ courses. They must be selected from 300-and 400-level courses.

Enrollment Requirements: Please meet with a criminal justice advisor prior to registration.

## Contact Information:

Public Programs, College of
School of Criminology and Criminal Justice
http://ccj.asu.edu/
UCENT 600
sccj@asu.edu
602-496-2369

## Dance Minor (FADANMIN)

Campus: TEMPE
Description: The School of Dance provides a dynamic and culturally diverse learning environment where students develop their creativity as artists, scholars and educators. The interdisciplinary curriculum promotes creative collaboration and a holistic approach to acquiring skills for successful career transitions. Movement practices, performance and creativity define the core of the program, and the rich educational experience is further enhanced by studies in:

- Criticism.
- Dance cultures.
- Dance history.
- Digital media.
- Movement science.
- Music.
- Philosophy.
- Production.
- Somatics.

Program Requirements: The minor in dance consists of 18 semester hours of course work, including twelve upper-division semester hours.
A minimum grade of "C" (2.00) or higher is required in all courses that fulfill the dance minor.
Dance minor requirements:
Choose one from the following courses, for a total of three credit hours:
DCE 100 Introduction to Dance (HU \& G)
DCE 201 Dance, Culture, and Global Context (HU \& G)
Choose one from the following courses, for a total of three credit hours:
DCE 300 Moving Histories (HU)
DCE 301 Meaning in Motion (L or HU)
DCE 350 Teaching Dance in the Classroom
DCE 402 Ethnography of Dance Practices ([L or HU] \& G)
DCE 394/494 Special Topics (See academic advisor for approved Special Topics courses.)
Choose two from the following courses, for a total of four credit hours:
DCE 110 Argentine Tango I
DCE 111 Raqs Sharqi I
DCE 112 Capoeira I
DCE 113 Dances of Africa 1
DCE 114 Dances of India I
DCE 116 T'ai Chi Ch'uan I
DCE 117 Feldenkrais I
DCE 118 Yoga/Pilates
DCE 120 Modern Dance 1
DCE 121 Ballet 1
DCE 122 Jazz I
DCE 123 Hip Hop I
DCE 124 Latin/Swing/Ballroom I
DCE 125 Latin/Salsa I
DCE 126 Country-Western
DCE $194 / 294$ Special Topics (see academic advisor for approved special topics courses)
DCE 210 Argentine Tango II
DCE 211 Raqs Sharqi II
DCE 216 T'ai Chi Ch'uan II
DCE 220 Modern Dance 2
DCE 221 Ballet 2
DCE 222 Jazz II
DCE 223 Hip Hop II
DCE 224 Latin/Swing/Ballroom II
DCE 225 Latin/Salsa II
DCE 324 Latin/Swing/Ballroom III
Choose additional dance electives to complete 18 credit hours overall, including 12 credit hours upper division.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Dance T
http://dance.asu.edu/
PEBE 107A
herbergeradvising@asu.edu
480-965-5029

## Design Studies Minor (ARDSNMIN)

Campus: TEMPE

Description: Students interested in design can earn a minor in design studies. This minor is a non-studio based program of study in design that focuses on the design disciplines offered in the ASU Herberger Institute:

- Architectural studies.
- Graphic design.
- Industrial design.
- Interior design.
- Landscape architecture.

The courses may also appeal to students who wish to pursue the study of design within the B.I.S.
Program Requirements: Courses selected must satisfy the minimum requirement of 18 credit hours for the minor. Twelve of the credit hours must be in 300 -level or 400 -level course work. To enhance understanding of the subject matter, some of the designated courses are sequential in nature and require certain prerequisites. Consequently, students should carefully note the semester in which these particular courses are offered. All designated courses for the minor in design studies are lecture courses. To pursue the minor in design studies, students must have a minimum cumulative GPA of 2.50.
Designated Courses for the Minor
Architecture and Landscape Architecture:
ALA 100 Introduction to Environmental Design, HU, G, H (3)
ALA 102 Architecture, Landscape Architecture and Society, G (3)
APH 313 History of Architecture I, HU, G, H (3)
APH 314 History of Architecture II, HU, G, H (3)
APH 421 First Concepts (3)
APH 494 Culture of Place (3)
APH 598 South American Architecture (3)
LPH 310 History of Landscape Architecture (3)
LPH 311 Contemporary Landscape Architecture, HU (3)
Design:
DSC 101 Design Awareness, HU, G (3)
Graphic Design:
GRA 101 Designing Life (3)
GRA 111 Graphic Design History I, HU (3)
GRA 112 Graphic Design History II (3)
GRA 225 Communication/Interaction Design Theory (3)
GRA 345 Design Rhetoric, L (3)
GRA 401 Creative Environment (3)
GRA 440 Finding Purpose (3)
Industrial Design:
IND 242 Materials and Design (3)

IND 243 Design for Ecology and Social Equity (3)
IND 316 20th-Century Design I, HU, H (3)
IND 317 20th-Century Design II, HU, H (3)
IND 344 Human Factors in Design (3)
IND 354 Principles of Product Design (3)
IND 470 Professional Practice for Industrial Design, L (3)
Interior Design:
INT 111 Interior Design Issues and Theories, HU (3)
INT 121 Introduction to Computer Modeling for Interior Design, CS (3)
INT 123 Introduction to Computer-Aided Design of Built Environments (3)
INT 131 Design and Human Behavior, SB (3)
INT 310 History of Interior Design I, HU, H (3)
INT 311 History of Interior Design II, HU, H (3)
INT 412 History of Decorative Arts in Interiors, HU (3)
INT 413 History of Textiles in Interior Design (3)
INT 415 Latin American Design (3)

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major.

## Contact Information:

Design and the Arts, Herberger Institute for
The Design School
http://herbergerinstitute.asu.edu
CDN 162
herbergeradvising@asu.edu
480-965-7007

## Digital Culture Minor (HIDGCMIN)

Campus: TEMPE

Description: The digital culture minor in the Herberger Institute for Design and the Arts focuses on the creative exploration of how new media is influencing our culture, or rather, the way we live, learn, create and communicate. The digital culture minor allows students to enhance their program of study with integrated, interdisciplinary training in creative processes and technical skills in new media with cultural applications. The curriculum is outcomes based rather than course sequence based. The curriculum uses an innovative proficiency-based network to connect courses across academic disciplines, instead of traditional methods such as course prerequisites. Proficiencies in the curriculum identify common generalized learning outcomes across disciplines participating in the initiative.

Program Requirements: The digital culture minor requires 21 credit hours (12 upper division) in four areas:

- Digital culture core (9).
- Digital media (6).
- Historical and theoretical studies in digital culture or related digital culture (3).
- Capstone culminating project (3).

A student must have a minimum GPA of 2.50 to be eligible to pursue the minor. A minimum grade of a " C " (2.00) and an overall GPA of 3.00 is required in all classes in the minor. Courses in the minor may not be used as part of a major. A minimum of 12 upper division semester hours of credit at ASU is required.

Enrollment Requirements: The Digital Culture Initiative will employ a specialized advisor/education program coordinator dedicated to advising students in the minor. There is no special application process for the digital culture minor.
Students add the minor by meeting with the academic advisor for their major. Students also are also required to meet with the digital culture education coordinator to develop the digital culture pathway that best meets the proficiencies for the work they are interested in pursuing.

## Contact Information:

Design and the Arts, Herberger Institute for
Arts, Media and Engineering Sch T
http://herbergerinstitute.asu.edu/degrees/digital_culture/
CDS 101
480-965-4495

## Economics Minor (LAECNMIN)

Campus: TEMPE
Description: The program of study is designed for students planning to seek employment upon completion of their undergraduate studies or for students intending to go on to graduate school or law school.

Program Requirements: This minor (and B.I.S. area of concentration) requires 18 credit hours of course work which includes ECN 211 and 212, and 12 hours of economics courses at the 300 level or above for which all prerequisites have been met. Only courses in which a student receives a grade of " C " (2.00) or higher may be used to meet these requirements.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information: http://wpcarey.asu.edu/ecn/advising.cfm.

## Contact Information:

Liberal Arts and Sciences, College of
Economics Program in CLAS
http://clas.asu.edu/minorscerts
BAC 653
wpcareyecn@asu.edu
480-965-2128

## Economics for Students Planning a Career in Law Minor (LAECNLMIN) <br> Campus: TEMPE

Description: The program of study is designed for students planning to seek employment upon completion of their undergraduate studies or for students intending to go on to graduate school or law school.

Program Requirements: This minor requires 18 credit hours of course work that includes ECN 211, 212, 312 (formerly 314), 450, 453 and one additional economics course at the 300 level or above for which all prerequisites have been met. Only courses in which a student receives a grade of " $C$ " $(2.00)$ or higher may be used to meet these requirements.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have
been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information: http://wpcarey.asu.edu/ecn/advising.cfm.

## Contact Information:

Liberal Arts and Sciences, College of
Economics Program in CLAS
http://clas.asu.edu/minorscerts
BAC 653
480-965-2128

## English Minor (ASENGMIN)

## Campus: WEST

Description: A minor in English represents an ideal choice for students who enjoy English, but who are committed to another major. The requirements ground the student in the basics of literary and cultural study, and then allow for a range of course offerings in creative writing, linguistics, rhetoric, literature and technical and professional communication. The minor will help the student to become a better writer, reader and thinker, making the English minor the perfect complement to any major.

Program Requirements: The minor in English requires a minimum of 24 credit hours, of which 18 must be upper division (300-400 level).
Required Core Course (3 credit hours)
ENG200 Critical Reading and Writing about Literature L/HU (3)
Campus Specific Requirements
Distribution Cluster Requirement ( 15 credit hours, of which six must be upper division)
Select one course from each distribution cluster (see advisor for specific course offerings). At least two courses must be at the 400level. Students may once only, use one course to satisfy two distribution requirements.

- Ethnicity, gender and postcoloniality.
- Literature and culture before 1860.
- Literature and culture after 1860.
- Rhetoric, writing and linguistics.
- Theory and interdisciplinary studies.

Additional hours, to complete 24 credit hours, are electives chosen from program offerings. Eighteen credit hours overall must be upper division.

Enrollment Requirements: Students wishing to pursue the English minor should consult an academic advisor in the unit offering that minor to ensure that the appropriate set of courses is taken. The student should also consult with an academic advisor in the college, division, or department of his or her major to make sure they recognize the minor, and to have the minor added to the program of study.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Please contact the division for more information. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/minors/english
FAB N201
harcs.dept@asu.edu
602-543-4444

## English Minor (LSENGMIN)

Campus: POLY
Description: The minor in English focuses on effective writing, critical thinking and sophisticated reading of literary and non-literary texts.

Program Requirements: This minor requires 24 credit hours of ENG courses, to include ENG 200, and a minimum of 12 upperdivision hours, of which six credit hours must be taken through the School of Letters and Sciences. All course work for the minor must be completed with a grade of "C" (2.00) or higher.

## Contact Information:

Letters and Sciences, School of
School of Letters and Sciences
http://sls.asu.edu/
SANCA 233
sls@asu.edu
480-727-1526

## English Minor with a Concentration in Linguistics Minor (LAENGMINN) Campus: TEMPE

Description: In the minor in English with a concentration in linguistics, students study the history and structure of language.

Program Requirements: The minor in English with a concentration in linguistics consists of 24 credit hours. Required courses are as follows:
ENG 200 Critical Reading and Writing About Literature, L/HU (3)
ENG 213 Introduction to the Study of Language (3)
ENG 221 Survey of English Literature, HU (3) or
ENG 222 Survey of English Literature, HU, H (3) or
ENG 241 Literatures of the United States to 1860, HU (3) or
ENG 242 Literatures of the United States, 1860 to Present, HU (3)
ENG 312 English in Its Social Setting, L/HU/SB (3)
ENG 314 Modern Grammar (3)
ENG 413 History of the English Language, HU (3)
The six additional hours are electives chosen from the department's offerings, with at least one course (three hours) required at the 300 or 400 level. A grade of " $C$ " (2.00) or higher is required in all courses for the minor.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu
LL 542
englishadvising@asu.edu
480-965-3168

## English Minor with a Concentration in Literature Minor (LAENGMINT)

Campus: TEMPE
Description: Students pursuing a minor in English with a concentration in literature study British, American and global literatures in English from the earliest writings to the present.

Program Requirements: The minor in English with a concentration in literature consists of 24 credit hours, including ENG 200 Critical Reading and Writing About Literature, L/HU (3) and one course from three of the following distribution areas:

- Literature and culture before 1800.
- Literature and culture after 1800.
- Literary theory and interdisciplinary studies.
- Transnational, postcolonial and global literatures.

At least one of these three distribution area courses must be 400-level. To complete the 24 credit hours, students choose electives from among the department's offerings. At least four courses ( 12 of the 24 hours) must be taken at the 300 or 400 level. A grade of " C " (2.00) or higher is required in all courses taken for the minor.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu
LL 542
englishadvising@asu.edu
480-965-3168

## Ethnic Studies Minor (ASETHMIN)

Campus: WEST

Description: Students take courses that introduce a general conceptual framework regarding race and ethnicity and how they intersect in the construction of social formations. Students seeking the minor in ethnic studies complete an internship that is designed to give a hands-on experience working in community-based settings. With an emphasis on service learning, which combines the acquisition of analytical skills from classroom instruction and work experience gained through internships, students are placed at a significant advantage to pursue their goals.

Program Requirements: The minor consists of 21 credit hours, 15 of which must be at the upper-division level. Students are encouraged to take courses that develop breadth rather than limiting their selection to courses in one particular discipline. Up to three credit hours of individualized instruction may be applied toward the minor. All courses must be passed with a minimum grade of "C" (2.00).
Required Courses ( 6 credit hours):
ETH 300 Principles of Ethnic Studies, C (3)
ETH 484 Ethnic Studies Internship (3)
Electives ( 15 credit hours):
These courses must be chosen from the approved ethnic studies course list in consultation with the ethnic studies advisor.

Enrollment Requirements: Students wishing to pursue the ethnic studies minor should consult an academic advisor in the unit offering that minor to ensure that the appropriate set of courses is taken. The student should also consult with an academic advisor in the college, division, or department of his or her major to make sure they recognize the minor, and to have the minor added to the program of study.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Please contact the division for more information. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/minors/ethnicstudies
FAB N201
harcs.dept@asu.edu
602-543-4444

## Family and Human Development Minor (LAFASMIN)

Campus: TEMPE
Description: A minor in family and human development, from the School of Social and Family Dynamics, exposes students to the basic course work and issues within the discipline. This program provides an exceptional balance to studies in psychology, communication, education, business or nursing.

Program Requirements: The minor in family and human development consists of 18 credit hours in which students specialize in family studies/child development. At least 12 of the 18 credit hours must be in upper-division courses. Students take the following courses:

CDE 232 Human Development, SB (3)
FAS 101: Growth in Personal Relationships, SB (3)
FAS 370 Family, Ethnic, and Cultural Diversity, SB, C (3)
Three courses (or nine credit hours) must be selected from the following and at least one course must be a CDE course:
CDE 337 Early Childhood Intervention (3)
CDE 430 Infant/Toddler Development in the Family, SB (3)
SOC 418 Aging and the Life Course (3)
CDE 498 Pro-Seminar (3) or FAS 498 Pro-Seminar (3)
FAS 301 Introduction to Parenting (3)
FAS 331 Marriage and Family Relationships, SB (3)
FAS 332 Human Sexuality, SB (3)
FAS 431 Parent-Adolescent Relationships, SB (3)
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of School of Social and Family Dynamics http://ssfd.clas.asu.edu/

## Film and Media Production Minor (FAFMPMIN)

Campus: TEMPE
Description: Students pursuing the film minor will study the basic production processes of film while exploring its history and contemporary social issues.

Program Requirements: The school offers a minor in film and media production consisting of 18 credit hours of course work. A grade of " $C$ " (2.00) or higher is required for all courses in the minor. All prerequisites for the minor courses must be met. Transfer students may transfer up to six credit hours toward the minor.
The following courses are required, for a total of 12 credit hours:
FMP 201 Film The Creative Process I, HU (3)*
FMP 250 Sex and Violence in Film and TV: Ethics Survey (3)
FMP 300 Focus on Film: Film Production for Nonmajors (3)
THE 403 Independent Film (3)
*Students considering a minor in theatre concurrently must complete an additional course in theatre or film to make up for the overlapping FMP 201 course.
Also required are six credit hours of upper division electives related to film and media production. Choose from courses with the FMP, THP or THE prefix. Contact the school for options and course requirements.
Courses ordinarily limited to majors only are available to minors on a second-priority basis; that is, minors may not register for these courses early, but are allowed to register after all major students' needs have been met.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Theatre and Film
http://theatrefilm.asu.edu
GHALL 232
herbergeradvising@asu.edu
480-965-5337

## Film and Media Studies Minor (LAFMSMIN)

Campus: TEMPE
Description: The film and media studies minor is useful for students who want to explore the critical and creative study of film and media. Students can select to study a range of courses that emphasize media and society, media industries, styles and genres and screenwriting.

Program Requirements: The film and media studies minor consists of 18 credit hours. Of the 18 credit hours, 12 credit hours are upper division courses. Required courses include:
FMS 100 Introduction to Film, HU
FMS 200 Film History, (L or HU) and H
FMS 300 Television and Cultural Studies, L or HU
Three upper-division courses from the areas of emphasis course list

For more information contact the film and media studies advisor.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have the accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering the minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allow the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of
Department of English
http://film.asu.edu/minor
LL 641
filminfo@asu.edu
480-965-6747

## Food and Nutrition Management Minor (ECFNTRMIN)

Campus: DTPHX
Description: This minor is available to any ASU student interested in learning about food and nutrition. The student will develop a greater understanding of nutrition, the food industry and food service operations.

Program Requirements: The minor requires that students take the following courses, for a total of 18 credit hours:
NTR 100 Introductory Nutrition (3) or NTR 241 Human Nutrition (3)
NTR 142 Applied Food Principles (3)
NTR 300 Computer Applications in Nutrition CS (3)
NTR 343 Food Service Purchasing (3)
NTR 344 Nutrition Services Management L (3)
NTR 445 Management of Food Service Systems (3)

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

- The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
- The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/programs/nutrition
HSC 1386
healthpromotion@asu.edu
480-727-1728

## French Minor (LAFREMIN)

Campus: TEMPE

Description: Students pursuing a minor in French gain an understanding of the language, literature, and cultures of French speaking peoples and regions. There are opportunities to partake in study abroad programs, which can serve to enhance a student's minor experience and education.

Program Requirements: The French minor requires 18 upper-division credit hours. In addition, specific required courses for each area follow and are in a brochure in the School of International Letters and Cultures. Course substitutions are allowed for heritage and advanced speakers of the language. Required courses include:
FRE 311 French Conversation, G (3)
FRE 312 French Composition, G (3)
FRE 321 French Literature, L/HU, H (3) or FRE 322 French Literature, L/HU (3)
Nine hours of upper-division French courses with at least three hours from the 400 level are also required.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
LL 440
silcadvising@asu.edu
480-965-6281

## Geography Minor (LAGCUMIN)

Campus: TEMPE
Description: The minor in geography enables students to be as broad or specific in their geographic education as they wish. Beyond the two required courses, the remaining courses should be chosen in consultation with the geography advisor.

Program Requirements: A minor in geography is awarded to students who complete a minimum of 18 hours in geography. A grade of " $C$ " (2.00) or higher is required for all courses taken for the minor. The following lower-division courses are required, for a total of six credit hours:
GCU 102 Introduction to Human Geography, SB (3)
GPH 111 Introduction to Physical Geography, SQ (4) or GPH 411 Physical Geography (3)
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/
COOR 5673
geoplan@asu.edu
480-965-7533

## Geological Sciences Minor (LAGLGMIN)

## Campus: TEMPE

Description: The geological sciences minor is designed for students interested in developing a basic understanding of earth science and analyzing issues through a scientific viewpoint. A minimum of 21 hours of geological science courses is required including two upper-division electives chosen after consultation with an academic advisor.

Program Requirements: A minor in geological sciences is awarded to students who complete a minimum of 21 credit hours of geological science courses. There are 15 credit hours of required courses:
GLG 101 Introduction to Geology I (Physical), SQ* G (3)
GLG 102 Introduction to Geology II (Historical), SG**, H (3)
GLG 103 Introduction to Geology I-Laboratory, SQ* (1)
GLG 104 Introduction to Geology II-Laboratory, SG** (1)
GLG 310 Structural Geology (3)
GLG 321 Mineralogy (3)
GLG 400 Geology Colloquium (1)
*Both GLG 101 and 103 must be taken to secure SQ credit.
**Both GLG 102 and 104 must be taken to secure SG credit.
The remaining six semester hours may be chosen among other upper-division geological sciences courses, except GLG 300 and 400 , after consultation with a departmental advisor.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
All students will be required to meet with an academic advisor in the School of Earth and Space Exploration (SESE) to declare the minor and confirm that the requirements are being met. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows recognition of the minor. The DARS system will be used for tracking student progress and verifying completion of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which courses in the minor are simultaneously being used to fulfill core requirements of the student's major.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Geological Sciences
http://sese.asu.edu
PSF 686
sesinfo@asu.edu
480-965-5081

## German Minor (LAGERMIN)

Campus: TEMPE

Description: Students pursuing a minor in German gain an understanding of the language, literature, and cultures of German speaking peoples and regions. There are opportunities to partake in study abroad programs, which can serve to enhance a student's minor experience and education.

Program Requirements: Required courses include:
Two GER 200-level courses (6)
GER 311 German Conversation, G (3) or GER 312 German Conversation, G (3)
GER 313 German Composition, G (3)
One 400-level GER course (3)
One upper-division GER course (3)
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that achievement officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
LL440
silcadvising@asu.edu
480-965-6281

## Global Health Minor (LASSHMIN)

Campus: TEMPE
Description: The minor in global health is an interdisciplinary program designed for students who seek a broad and flexible set of skills for understanding contemporary health challenges and thinking about how they might best be solved. "Global" is understood in the anthropological sense, meaning ways of understanding and addressing disease, health and well-being that can incorporate all cultures, places and time, and that can integrate knowledge of health's social, historical, biological and ecological dimensions.

Program Requirements: The minor is comprised of 18 credit hours. Students must complete the following:

- SSH/ASB 100 Intro to Global Health.
- Time depth course.
- Poverty, justice and global health course.
- Culture society and health course.
- An approved global health study abroad (summer session, six credits minimum).

Enrollment Requirements: Students must speak with an advisor in the School of Human Evolution and Social Change to declare a minor.

## Contact Information:

Liberal Arts and Sciences, College of
School of Human Evolution \& Social Change
http://shesc.asu.edu/degree-ug
SHESC 233
shesc.undergrad@asu.edu
602-965-6215

## Global Studies Minor (LASGSMIN)

Campus: TEMPE

Description: The School of Politics and Global Studies offers a minor in global studies for students who wish to examine global issues from a transdisciplinary perspective focused on an overarching theme of quality of life.

Program Requirements: The global studies minor consists of 18 credit hours, with at least 12 credit hours in upper division courses.
Required courses are:
SGS 101 Thinking Globally: Individual and Authority (3) or SGS 301 Principles of Global Studies (3)
SGS 303 Global Trends (3)
The remaining 12 credit hours may be chosen among additional SGS courses. The student must earn at least a " C " (2.00) in a course for credit hours to be counted toward the minor. Twelve of the 18 credit hours must be taken at the ASU Tempe campus. Only three credits of SGS 484: International Internship may be counted toward the minor. For minor verification, students must consult the global studies advisor.

Enrollment Requirements: Students who wish to pursue minors should get the permission of the department of their major as well as meet with the global studies advisor in the School of Politics and Global Studies.

## Contact Information:

Liberal Arts and Sciences, College of
School of Politics and Global Studies
http://pgs.clas.asu.edu/
COOR 6705
globalstudies@asu.edu
480-965-8563

## History Minor (ASHISMIN)

Campus: WEST

Description: The minor in history, within the New College of Interdisciplinary Arts and Sciences, trains students in the use of basic tools and methods of the historical discipline. Students are exposed to a broad span of modern history, a wide range of historiographical perspectives and approaches, and such fundamental categories of historical analysis as race, class, gender and ethnicity.

Program Requirements: The minor in History consists of 18 credit hours of history course work with a grade of " C " (2.00) or higher, of which 12 credit hours must be upper division (300-400 level).
Choose one of the following combinations ( 6 credit hours):
HST 109 United States to 1865, HU/SB, H and
HST 110 United States since 1865, SB, H
or
HST 100 Global History to $1500, \mathrm{HU}, \mathrm{H}, \mathrm{G}$ and
HST 101 Global History since 1500, HU, G, H
or
HST 313 American Cultural History I, SB, H and
HST 314 American Cultural History II, HU/SB, H
or choose two of three offered:
HST 102 Western Civilization, SB, H
HST 103 Western Civilization, HU/SB, H
HST 104 Western Civilization, HU/SB, G, H

Upper division requirement (3 credit hours):
HST 300 Historical Inquiry, L/HU/SB, H
History electives (9 credit hours)

Enrollment Requirements: Students wishing to pursue the History minor should consult an academic advisor in the unit offering that minor to ensure that the appropriate set of courses is taken, to sign the minor check sheet, and to have the minor added to their program of study. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major recognizes the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Please contact the division for more information. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/minors/history
FAB N201
harcs.dept@asu.edu
602-543-4444

## History Minor (LAHISMIN)

Campus: TEMPE
Description: Students who pursue the minor in history study the growth and development of human society from all aspects political, social, economic and cultural. The school covers the history of Europe, the U.S., Asia, Latin America and Africa, and courses are designed to give students both breadth and depth in understanding today's complex world.

Program Requirements: The history minor consists of 18 credit hours of course work, at least 12 hours of which are in upperdivision course work. Students earning a minor in history must complete one 12-hour HST geographic concentration (U.S., Europe, Asia or Latin America). The School of Historical, Philosophical and Religious Studies requires a grade of at least "C" (2.00) in all courses in the minor. A minimum of six upper-division hours in the minor must be taken in residence at the Tempe campus.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://shprs.clas.asu.edu/history
COOR 3rd floor Advising Center
SHPRSadvising@asu.edu
480-965-8364

## History Minor (LSHISMIN)

Campus: POLY

Description: The minor in history focuses on American history, European history, Southwest history, environmental history and related fields.

Program Requirements: This minor requires 18 credit hours of HST courses to include a minimum of 12 upper-division hours, of which six credit hours must be taken through the School of Letters and Sciences. All course work for the minor must be completed with a grade of "C" (2.00) or higher.

## Contact Information:

Letters and Sciences, School of
School of Letters and Sciences
http://sls.asu.edu/
SANCA 233
sls@asu.edu
480-727-1526

## Human Nutrition Minor (ECNTRMIN)

Campus: DTPHX
Description: This minor program is available to any ASU student interested in learning about human nutrition. The student will develop a greater understanding of how nutrition contributes to healthy lifestyles and disease prevention.

Program Requirements: The minor requires that students take the following courses, for a total 18 credit hours:
NTR 241 Human Nutrition (3)
NTR 340 Applications in Human Nutrition (3)
NTR 341 Introduction to Planning Therapeutic Diets (3)
NTR 440 Advanced Human Nutrition I (3)
NTR 441 Advanced Human Nutrition II (3)
NTR 444 Medical Nutrition Therapy (3)

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/programs/nutrition
HSC 1386
healthpromotion@asu.edu
480-727-1728

## Interdisciplinary Organizational Studies Minor (ASIOSMIN)

Campus: WEST
Description: The minor in interdisciplinary organizational studies is designed to increase students' understanding of the behavior and the dynamics of individual, group and organizational processes in the workplace. It incorporates perspectives from the behavioral and social sciences, communication studies and management. The minor is learner-centered and allows students to select course work that matches their career and educational goals.

Program Requirements: The minor consists of 21 credit hours, of which 18 must be upper-division course work.
Required Courses (12 credits)
ASB 440 Women in the Global Factory, SB, G (3) or POS 437 Women, Power, Politics, SB, C (3)
PGS 430 Industrial Psychology (3) or SBS 461 Program Evaluation and Policy Research (3)
PGS 453 Organizational Behavior, SB (3)
Research methods course (3)*
Cluster 1: Courses Focused on Organizations
Choose two from the following courses for a total of six credits:
COM 450 Theory and Research in Organizational Communication, SB (3)**
COM 451 Communication and Work Relationships (3)**
COM 453 Communication Training and Development (3)**
GLB 303 Relationship Management (3)
MGT 301 Principles of Management (3)
MGT 412 Managing Human Resources (4)

PGS 430 Industrial Psychology (3)***
PGS 482 Social Influence and Consumer Behavior, SB (3)
PHI 360 Business and Professional Ethics, HU (3)
RTM 301 Leadership in Recreation and Tourism (3)
SBS 461 Program Evaluation and Policy Research (3)***
SOC 324 Work and the Workplace, SB, H (3)
SOC 419 Organizations and Technological Change, G (3)
PGS 484, COM 484, or SOC 484 (or others) Internship in Organizations (3)

The internship site must be approved by the SBS advisor.
Cluster 2: Courses Focused on Diversity Within Organizations
Choose one from the following courses for a total of three credits:
COM 463 Cultural and Intercultural Communication Theory and Research, SB, G (3)**
PGS 480 Cross-Cultural Social Psychology, SB, G (3)
POS 437 Women, Power, and Politics, SB, C (3)
SOC 270 Racial and Ethnic Minorities, SB, C (3)
SOC 400 Perspectives on Aging, SB (3)
SOC 426 Social Inequality, SB (3)
WST 380 Race, Class, and Gender, SB, C (3)

* SBS advisor's approval is required.
** Prerequisites COM 308 and 309 may be waived for students not majoring in communication studies.
*** Course may be selected if not used to fulfill core requirements.

Enrollment Requirements: The minor in interdisciplinary organizational studies is open to all undergraduate majors. A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor. Please contact the division and visit the website for more information.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/IOS
FAB S105
SBS.Dept@asu.edu
602-543-6058

## Interior Design History Minor (ARINTMIN)

## Campus: TEMPE

Description: The minor in interior design history is available to students interested in design and culture. The courses designated for the minor are part of the professional studies in interior design within the program of interior design. Moreover, the courses serve to inform the students about the importance of the global community, especially sociocultural groups, and the impact of the global community on the design of the interior environment.

Program Requirements: The selected courses satisfy the minimum requirement ( 18 credit hours, 12 of which must be from the 300 or 400 level) for the minor. To enhance the understanding of the subject matter, the selected courses are sequential in nature and require certain prerequisites. Consequently, students should carefully note the semester in which any of these courses are offered. Required Courses:
DSC 101 Design Awareness, HU, G (3)
INT 111 Interior Design Issues and Theories, HU (3)
INT 310 History of Interior Design I, HU, H (3)
INT 311 History of Interior Design II, HU, H (3)

INT 412 History of Decorative Arts in Interiors, HU (3)
INT 413 History of Textiles in Interior Design (3)
Students must have an overall GPA of 2.50 or higher and achieve a minimum 2.50 GPA in minor classes to be awarded the minor.
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Design and the Arts, Herberger Institute for
The Design School
http://herbergerinstitute.asu.edu/degrees/design.php
CDN 162
herbergeradvising@asu.edu
480-965-8947

## Italian Minor (LAITAMIN)

## Campus: TEMPE

Description: Students pursuing a minor in Italian gain an understanding of the language, literature and cultures of Italian speaking peoples and regions. There are opportunities to partake in study abroad programs, which can serve to enhance a student's minor experience and education.

Program Requirements: The Italian minor requires 18 upper-division credit hours. In addition, specific required courses for each area follow and are in a brochure in the School of International Letters and Cultures. Course substitutions are allowed for heritage and advanced speakers of the language. Students may use 6 hours from the 200 -level toward the minor. A minimum of 12 hours must be upper division.

Required courses include:
ITA 311 Italian Conversation, G (3) or ITA 312 Italian Composition, G (3) or ITA 315 Italian for Business (3)
ITA 321 Introduction to Italian Literature I (3) or ITA 322 Introduction to Italian Literature II (3)
One 400-level ITA course (3)

The remaining elective courses should be chosen to fulfill the upper division requirements set by the college. Students may use a maximum of 6 credits from the 200 -level.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of

School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
LL 440
silcadvising@asu.edu
480-965-6281

## Justice Studies Minor (LAJUSMIN)

Campus: TEMPE
Description: The minor in justice studies is designed for students interested in developing an understanding of meanings of justice and injustice and analyzing often controversial issues through critical inquiry and social science investigation.

Program Requirements: Eighteen credit hours of graded classroom JUS course work are required, including JUS 105 or 305 and JUS 303. No pass/fail or noncredit course work may be applied to the minor. A minimum of nine credit hours must be resident credit at the Tempe campus, and at least 12 credit hours must be upper-division. Students must receive a minimum grade of " $C$ " (2.00) for all courses in the minor and meet all course eligibility requirements, including prerequisites.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://justice.clas.asu.edu
WILSN 125
justiceinfo@asu.edu
480-965-7682

## Kinesiology Minor (LAKINMIN)

Campus: DTPHX, TEMPE

Description: The kinesiology minor is for the student interested in gaining a disciplinary knowledge of anatomical, biomechanical, developmental, neural, physiological, and psychological mechanisms underlying human movement.

## Program Requirements:

- To be eligible to declare a minor in kinesiology, students must have at least 24 earned credit hours and a minimum 3.30 cumulative ASU or transfer GPA.
- The minor in kinesiology consists of the 21 credit hours shown below and 15-21 credit hours of prerequisite courses.
- All prerequisite courses must be completed with a grade of "C" (2.00) or higher before taking the respective kinesiology core course.
- KIN 101 Introduction to Kinesiology must be completed with a "B-" (2.67) or higher.
- All other kinesiology courses must also be completed with a grade of "C" (2.00) or higher.
- In addition, to remain eligible to continue in the kinesiology minor, students will have to maintain a GPA of 3.00 or above in all of the courses required for the minor (including prerequisites without the 'KIN' prefix).

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have
been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/node/5672
PEBW 218
kinesundgrad@asu.edu
480-965-3875

## Landscape Architecture Studies Minor (ARLNDMIN)

## Campus: TEMPE

Description: The minor in landscape studies is designed for students who have an interest in landscape aesthetics, but are pursuing a major in another field. The course selection is intended to provide greater understanding of landscape issues that may be relevant in related professional disciplines and to broaden knowledge about the landscape in which we live.

Program Requirements: A minimum of 18 credit hours (to include 12 credit hours of upper-division course work) are required for the minor.
Required Courses:
ALA 100 Introduction to Environmental Design, HU, G, H (3)
ALA 102 Architecture, Landscape Architecture, and Society, HU,G (3)
LPH 310 History of Landscape Architecture, HU, H (3)
LPH 311 Contemporary Landscape Architecture, HU (3)
Six additional upper-division credit hours of electives in the landscape architecture history and theory concentration must be selected from the following list:
APH 494 Culture of Place, C (3)
APH 511 Energy Environment Theory (3)
ANP 494 Special Topics (1-3)
LPH 394 Special Topics (3)
LPH 410 Social Factors in Landscape and Urban Planning (3)
LPH 411 Landscape Architecture Theory and Criticism (3)
LPH 412 Landscape Ecology and Planning (3)
LPH 413 Southwest Landscape Interpretation (3)
LPH 494 Special Topics (3)
LPH 499 Individualized Instruction* (3)
LPH 598 Special Topics (3)
LPH 485 International Field Studies in Landscape Architecture (6)

* These courses require a petition to the School of Architecture + Landscape Architecture.

A minimum GPA of 2.50 in minor courses is required to earn the minor in landscape architecture studies. In addition, students may not use a core course to count toward the minor. Students pursuing the B.S.D. in architecture must petition the school to request a substitution for any core courses that are also included in the landscape architecture minor.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major.

## Contact Information:

Design and the Arts, Herberger Institute for
The Design School
http://herbergerinstitute.asu.edu/degrees/sala.php
CDN 162
herbergeradvising@asu.edu
480-965-3536

## Life Sciences Minor (ASLSCMIN)

## Campus: WEST

Description: A minor in life sciences can be a valuable asset particularly when paired with an appropriate major. For instance, a biology minor paired with a political science major would provide a good background for someone who wanted to practice environmental law.

Program Requirements: Required Courses
BIO 181 General Biology I, SG (4)
BIO 182 General Biology II, SQ (4)
BIO 320 Fundamentals of Ecology (3)
BIO 322 Fundamentals of Ecology Laboratory (1)
BIO 353 Cell Biology (3)
BIO 354 Cell Biology Laboratory (1)
CHM 113 General Chemistry, SQ (4)
CHM 116 General Chemistry II, SQ (4)
LSC 347 Fundamentals of Genetics (3)
LSC 348 Fundamentals of Genetics Laboratory (1)
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Please contact the division for more information. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Mathematical and Natural Sciences
http://newcollege.asu.edu/programs/lifesci/
CLCC 217
MNS.Dept@asu.edu
602-543-6050

## Materials Science and Engineering Minor (ESMSEMIN)

Campus: TEMPE
Description: The materials science and engineering minor is designed to give other science and engineering majors an in-depth understanding of materials, including their structure, processing, properties, performance and relationships.

Program Requirements: Students are required to take six courses ( $20-21$ credits), listed below:
CHM 114 (4), or CHM 113 (4) \& CHM 116 (4)
MSE 250 Structure and Properties of Materials (3)
MSE 355 Structure and Microstructure of Materials (3)
MSE 356 Structure and Microstructure of Materials Laboratory (1)
Two MSE courses at the 300 level or higher
One materials-related course from the following list:
BME 318 Biomaterials (4)
CEE 353 Civil Engineering Materials (3)
CHE 458 Semiconductor Material Processing (3)
CHM 471 Solid State Chemistry (3)
EEE 352 Properties of Electronic Materials (4)
EEE 436 Fundamentals of Solid-State Devices (3)
MAE 351 Manufacturing Processes (3)
Any MSE course at the 300 level or higher
PHY 481 Materials Physics I (3)

Enrollment Requirements: Students need sophomore status and a minimum 3.00 GPA to enroll in the minor in materials science and engineering, and a 2.50 GPA in all courses in the minor to receive the minor.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Materials Program
http://engineering.asu.edu/macme
ECG 202
macme@asu.edu
480-965-2335

## Mathematics Minor (ASMATHMIN)

Campus: WEST
Description: The minor in mathematics explores the study of higher mathematics. It is designed to enable the student to understand the mathematics most commonly used in business, economics and science. It is expected that students in the minor will be able to reason, and to find creative solutions to problems that were either presented to them or meaningfully formulated by them. The minor is recommended for students who plan to major in integrative studies, life sciences and business, and those who are preparing for further graduate study.

Program Requirements: The minor in mathematics consists of a minimum of 27 credit hours, of which nine credit hours must be taken in the mathematical sciences and applied computing department.
Required Courses (27)

MAT 270 Calculus with Analytic Geometry I, MA (4)
MAT 271 Calculus with Analytic Geometry II, MA (4)
MAT 272 Calculus with Analytic Geometry III, MA (4)
MAT 300 Mathematical Structures (3)
MAT 342 Linear Algebra (3)

Choose three electives from the following courses, or other approved course, in consultation with a departmental advisor, for a total of nine credits:

MAT 310 Introduction to Geometry (3)
MAT 371 Advanced Calculus I (3)
MAT 411 History and Philosophy of Mathematics, HU, H (3)
MAT 443 Abstract Algebra (3)
MAT 445 Theory of Numbers (3)
STP 420 Introductory Applied Statistics, CS (3)

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Please contact the division for more information. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Mathematical and Natural Sciences
http://www.newcollege.asu.edu/programs/math_sci/
CLC C217
MNS.Dept@asu.edu
602-543-6050

## Mathematics Minor (LAMATMIN) <br> Campus: TEMPE

Description: The minor in mathematics is designed for students who want to further their knowledge of mathematics and is recommended for students who are majoring in such disciplines as physics, engineering, business, economics and the life and social sciences where the need for quantification in the analysis of phenomena is strong.

Program Requirements: The minor in mathematics consists of a minimum of 18 credit hours. Required courses are as follows, for a total of nine to eleven hours:
MAT 271 Calculus with Analytic Geometry II MA (4) or MAT 266 Calculus for Engineers II (3)
MAT 272 Calculus with Analytic Geometry III MA (4) or MAT 267 Calculus for Engineers III (3)
MAT 342 Linear Algebra (3) or MAT 343 Applied Linear Algebra (3)
Electives must be upper-division courses in mathematics (MAT) or Statistics and Probability (STP). Students may not apply MAT 411 or 485 or a course not offered at ASU to the minor, unless otherwiseapproved by a department advisor.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of Mathematical and Statistical Sciences
http://math.asu.edu/
PSA 211
math@asu.edu
480-965-7195

## Media Analysis Minor (CSCMOMINA)

Campus: DTPHX

Description: The mass media, more than ever before, plays a vital role in how information is disseminated and how societies are shaped and function. As traditional forms of media and information dissemination change rapidly in an increasingly technological world, it is more important than ever for students to understand the way that media work, as well as learn to evaluate the messages that are sent. All students can benefit from the study of mass communications institutions, functions and techniques. In this minor, students will learn to understand the roles that media play, how they are changing and their impact. They will be given the tools they need to critically evaluate, analyze and interpret media messages in order to become wise consumers of media themselves.

Program Requirements: The minor of media analysis consists of 18 credit hours of course work. This is a requirement consistent with many other minor programs at Arizona State University and at other colleges and universities. The focus of the program is on media analysis. Students in the minor will concentrate on evaluating the impact of information dissemination rather than on topics that focus on the practice of gathering and distributing messages. Students in the minor may not register for courses in the professional journalism curriculum.
To take upper-division courses, the student must be at least a sophomore ( 25 credit hours). To pursue the minor in media analysis, the student must maintain a minimum 2.00 overall GPA, obtain a minimum grade of " " $C$ " " 2.00 ) in each course in the minor and have a major other than journalism and mass communication.
Three specific classes will be required (nine hours). The required classes are:
MCO 120 Media and Society, SB (3)
MCO 240 Media Issues in American Pop Culture (3)
MCO 418 History of Mass Communication, SB, H (3)
In addition, students select three additional courses (nine hours) from the list of electives offered by the Journalism school. The common element of these courses is that they focus on understanding specific aspects of the mass media and how those aspects impact individuals and societies in terms of function, effects, and enculturation. Electives offered include:
MCO 200 Introduction to the Electronic Media (3)
MCO 240 Media Issues in American Pop Culture (3)
MCO 430 International Mass Communication, G (3)
MCO 435 Social Media (3)
MCO 450 Visual Communication, HU (3)
MCO 455 War and the Mass Media (3)
MCO 460 Race, Gender and Media, C (3)
MCO 465 Sports and Media (3)
MCO 473 Sex, Love and Romance in the Mass Media, SB (3)
MCO 494 Special Topic courses (3)
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information: http://cronkite.asu.edu/undergrad/minor_media_analysis.php.

## Contact Information:

Journalism, Walter Cronkite School of
Walter Cronkite School of Journalism \& Mass Comm
http://cronkite.asu.edu
CRONK 220
cronkiteadvising@asu.edu
602-496-5055

Military Leadership Minor (LAMISMIN)
Campus: TEMPE

Description: The minor in military leadership is designed to enhance the student's learning experience by providing tools to prepare them for leadership roles in various organizations including business, government and education. Students complete courses which will cover academic and practical skills in many areas, including:

- Effective communication.
- Leadership ethos.
- Leading, motivating and empowering others.
- Negotiating.
- Problem solving.
- Team building.

Program Requirements: The minor in military leadership consists of 18 credit hours, of which, 12 must be at the 300 or 400 level. Required courses are as follows:
MIS 301 Advanced Military Science I (3)
MIS 302 Advanced Military Science II (3)
MIS 401 Advanced Military Science III (3)
MIS 402 Advanced Military Science IV (3)

At least 12 credits must be in residence on an ASU campus.

The six additional hours are electives chosen from the following course offerings:
MIS 410 American Defense Policy I (3)
MIS 412 American Defense Policy II (3)
MIS 294 Special Topics (3)
MIS 499 Individualized Leadership Instruction (3)
HST 456 Vietnam War (3)
HST 408 Civil War and Reconstruction (3)
Enrollment Requirements: Students wishing to earn a minor in military leadership must first qualify to be enrolled in MIS 301. In order to be eligible for this, students must have completed one of the following:

- Leader's training course in Ft. Knox, KY.
- Prior honorable military service.
- Three years of introductory leadership training in high school JROTC.
- Twelve hours in MIS 100 and MIS 200 level courses.


## Contact Information:

Liberal Arts and Sciences, College of
Department of Military Science
http://militaryscience.clas.asu.edu
SS 330
armyrotc@asu.edu
480-965-3318

## Music Minor (FAMUSMIN)

Campus: TEMPE
Description: The music minor is designed for those students who are interested in a broad introduction to the study of music. The program allows for a diverse exposure to traditional through contemporary music practices, with numerous options to select courses based on students' interests.

Program Requirements: The School of Music offers a minor in music consisting of 24 credit hours of course work, including a minimum 12 credit hours upper division. A minimum grade of " $C$ " (2.00) is required in all courses.
Required Courses (12 credit hours)
MHL 201 Mac Literacy for Musicians* (3)
MUS 194 Performance: Bach to Bebop (3)
MUS 100 Fundamentals of Music Notation (3)
MUS 340 Survey of Music History (3)

Music history: Select two of the following five courses (6 credit hours)
MUS 347 Jazz in America (3)
MUS 355 Survey of American Music (3)
MUS 356 Survey of Musical Theatre (3)
MUS 361 African Music (3)
MUS 410 History of Women in Music (3)
Electives: Choose two of the following five courses ( 6 credit hours)
MUS 354 Rock and Roll (3)
MUS 354 Rock and Roll since 1971 (3)
MUS 354 Hip-Hop (3)
MUS 354 Elvis Presley (3)
MUS 354 The Beatles (3)

* The online version of this course is required.

Note: MHL, MTC, MUP courses may be accepted as electives if the appropriate prerequisites are met and with instructor approval. Music reading and notation skills are a prerequisite for the music minor.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the school for more information.

## Contact Information:

Design and the Arts, Herberger Institute for
Dean, Herberger Institute for Design and the Arts
http://music.asu.edu
CDS 101
herbergeradvising@asu.edu
480-965-3371

## Nonprofit Administration Minor (PPNLMMIN)

Campus: DTPHX
Description: The minor in nonprofit administration empowers students to positively impact the community in which they work. Course work introduces students to the competencies required for successful professional careers with nonprofit, social sector organizations that exist to improve the quality of life of communities. The nonprofit sector in the U.S. is unique in form and function, with more than 1.2 million organizations in the U.S. The Arizona nonprofit sector also is experiencing robust growth with more than 29,000 registered nonprofits and more than 1,500 new nonprofits formed yearly. The minor allows students enrolled in other undergraduate programs at ASU to broaden their educational experiences. Students from such various disciplines as business, education, museum studies, nursing, public affairs, religious studies, social work and many others might find this program a beneficial supplement to their existing program.

Program Requirements: The minor requires a total of 15 credit hours, six credit hours of required courses and nine credit hours of elective courses. A verification of minor form, available through the school's website is required.
Required core courses (6)
NLM 160 Voluntary Action and Community Leadership (3)
NLM 220 Introduction to Nonprofit Organizations (3)

Choose three elective courses from the following (9)
NLM 300 Fundraising and Resource Development (3)
NLM 301 Sustainable Communities (3)
NLM 302 Inclusive Community Development (C) (3)

NLM 310 Volunteer Management (3)
NLM 430 Managing Nonprofit Organizations (3)
NLM 435 Service Learning for Community Development (3)
NLM 494 Special Topics (3)
PRM 303 Program Planning (L) (3)
PRM 486 Special Events Management
Standards

- A minimum "C" (2.00) grade required for all classes in the minor.
- A minimum GPA of 2.00 for those pursuing the minor; a major or pre-major, other than B.S. in Nonprofit Leadership and Management.
- Fifteen hours of graded classroom course work (no internship, no independent study).
- Must be a junior to take 400 -level courses.
- No double counting of courses for both a major and the minor.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
Students wishing to pursue the nonprofit administration minor should consult with an academic advisor in the college or department of their majors to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Courses taken as part of a university minor may not count toward both the major degree and the minor. Students pursuing a B.S. in nonprofit leadership and management are not eligible to complete this minor.

## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://scrd.asu.edu
UCENT 550
scrd@asu.edu
602-496-0550

## Nutrition and Healthy Living Minor (NUNHLMIN)

Campus: DTPHX
Description: The nutrition and healthy living minor will provide a strong knowledge base in nutrition and healthy diet planning to complement many majors.

Program Requirements: The minor requires completion of a minimum of 18 nutrition credit hours.
Required Classes (12)
NTR 241 Human Nutrition (3)
NTR 340 Applications in Human Nutrition (3)
NTR 341 Introduction to Planning Therapeutic Diets (3)
NTR 450 Nutrition in the Lifecycle (3)

Upper Division electives (6)
Select two courses from the following list:
NTR 320 history of Nutrition (3)
NTR 345 Development of Healthy Cuisines (3)
NTR 346 Sports Nutrition (3)
NTR 348 Cultural Aspects of Food (3)
NTR 350 Nutrition Counseling (3)
NTR 351 Nutrition and Health communication (3)
NTR 430 (494) nutrition in the Media (3)
NTR 444 Medical Nutrition Therapy (3)
Additional prerequisites required for these classes: CHM 101 (or 113) and BIO 201.

## Contact Information:

Nutrition and Health Promotion, School of School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/nutrition
HSC 1386
healthpromotion@asu.edu
480-727-1670

## Parks and Protected Area Management Minor (PPPRMMINT)

Campus: DTPHX

Description: As the Southwest continues to develop and urbanize, the demands and pressures on public lands and natural resources continues to grow. The interplay between society and natural resources is key to understanding modernity and continues to be at the center of policy issues and quality of life debates in the West. The minor in parks and protected area management introduces students to the role of parks and protected areas, with a focus on the unique issues faced by urban-proximate natural area managers. The minor allows students enrolled in other undergraduate programs at ASU to broaden their educational experiences. Students from such various disciplines including business, education, nursing, public affairs, social work and many others might find this program a beneficial supplement to their existing program. Students interested in the parks and protected area management minor may also be interested in therapeutic recreation, available through the parks and recreation management program.

Program Requirements: Completion of a parks and protected area management minor in the School of Community Resources and Development requires the follwoing:

- Fifteen hours of graded classroom coursework (no internship, no independent study).
- Twelve hours of course work at the upper-division level, from the approved list.
- A minimum grade of "C"; (2.00) is required for all classes in the minor.
- No double counting of courses for both a major and the minor.

Required core courses (12)
PRM 120 Leisure and Quality of Life (3)
PRM 370 Natural Resource Recreation Planning and Management (3)
PRM 380 Wilderness and Parks in America (3)
TDM 480 Sustainable Tourism (3)

Choose one elective course from the following (3)
PRM 301 Sustainable Communities (3)
PRM 340 Outdoor Survival (3)
PRM 470 Environmental Interpretation and Education (3)
TDM 494 Special Topics, as approved by a SCRD advisor (3)
TDM 448 Heritage and Cultural Tourism (3)

## Standards

- A minimum GPA of 2.00 for those pursuing the minor, a major, or pre-major, other than a B.S. in parks and recreation management.
- Must be a junior to take 400-level courses.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
Students wishing to pursue the parks and protected area management minor should consult with an academic advisor in the college or department of their major to make sure the college or department of the major allows the recognition of the minor. Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Courses taken as part of a university minor may not count toward both the major degree and the minor. Students pursuing the B.S. in parks and recreation management major are not eligible to complete this minor.

## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://scrd.asu.edu
UCENT 550
scrd@asu.edu
602-496-0550

## Philosophy Minor (ASPHIMIN)

Campus: WEST
Description: The philosophy minor is designed to provide students with an understanding of central philosophical issues. The minor provides students with:

- A knowledge of the most important problems and ideas in the philosophical areas studied.
- A capacity for critical thinking and analytical reasoning.
- The ability to present one's positions effectively through oral and written communication.

Program Requirements: The minor in philosophy consists of 21 credit hours of philosophy course work, of which 15 must be upperdivision hours (300-400 level). Only courses in which the student earns a grade of "C" (2.00 on a scale of 4.00) or higher will fulfill requirements for the minor.
Courses are to be selected from the following list in consultation with an advisor to create a coherent and complete program of study:

MAT 411 History and Philosophy of Mathematics, HU, H (3)
IAS 484 Internship (3)
IAS 494 ST: Special Topics (3)
PHI 101 Introduction to Philosophy, HU (3)
PHI 103 Principles of Sound Reasoning, L/HU (3)
PHI 306 Applied Ethics, HU (3)
PHI 340 Bioethics, HU (3) or IAS 340 Bioethics, HU (3)
PHI 360 Business and Professional Ethics, HU (3)
PHI 406 Moral Dilemmas, L/HU (3) or IAS 406 Moral Dilemmas, L/HU (3)
PHI 407 Environmental Philosophy and Policy, L/HU (3) or IAS 407 Environmental Philosophy and Policy, L/HU (3)
PHI 408 Feminist Ethics, HU (3) or IAS 408 Feminist Ethics, HU (3)
PHI 494 Special Topics (3)
PHI 499 Individualized Instruction (3)
Enrollment Requirements: Students wishing to pursue the philosophy minor should consult an academic advisor in the unit offering that minor to ensure that the appropriate set of courses is taken. The student should also consult with an academic advisor in the college, division, or department of his or her major to make sure they recognize the minor, and to have the minor added to the program of study.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Please contact the division for more information. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/minors/philosophy
FAB N201
harcs.dept@asu.edu
602-543-4444

## Philosophy Minor (LAPHIMIN)

Campus: TEMPE
Description: The minor in philosophy provides students with an understanding of philosophical inquiry and method. The minor offers an introduction to the central themes both in the history of philosophy and in the current literature. Minor students have the opportunity to sharpen their critical reasoning skills while addressing profound questions regarding the nature of:

- Existence.
- Knowledge.
- Law.
- Morality.
- Politics.
- Science.

Program Requirements: A minor in philosophy consists of 18 credit hours, of which at least 12 must be in the upper division and approved by an advisor in the school. All courses must be passed with a minimum grade of "C" (2.00). No more than two courses may be taken in any one of the following philosophical subdisciplines:

- Metaphysics
- Epistemology
- Logic
- History of Philosophy
- Ethics / Political Philosophy

Students should consult with undergraduate advising in the School of Historical, Philosophical \& Religious Studies about a proposed selection of courses before registering.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or school of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor. A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the School of Historical, Philosophical and Religious Studies for more information.

## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://shprs.clas.asu.edu/philosophy
COOR 3rd floor Advising Center
SHPRSadvising@asu.edu
480-965-8364

## Physics Minor (LAPHYMIN)

Campus: TEMPE
Description: Physics is concerned with the nature, structure and interactions of matter and radiation. Adding a physics minor to another major program of study provides a student with the fundamental scientific basis to address the most challenging opportunities faced in a student's career.

Program Requirements: Required courses (24)
Choose between the following course combinations (4):
PHY 150 Physics I, SQ (4) or
PHY 121 University Physics I: Mechanics, SQ (3) and PHY 122 University Physics Laboratory 1, SQ (1)*
Choose between the following course combinations (4):
PHY 151 Physics II, SQ (4) or
PHY 131 University Physics II: Electricity and Magnetism, SQ (3) and PHY 132 University Physics Laboratory 2, SQ (1)**
PHY 252 Physics III, SQ (4)
PHY 361 (3)

Two upper-division electives (to be selected with the approval of the physics advisor) (6-7)One lab course: PHY 333 (3) or PHY 334 (2)
*Both PHY 121 and PHY 122 must be taken to secure SQ credit.
**Both PHY 131 and PHY 132 must be taken to secure SQ credit.
A minimum of 12 upper division credit hours are required to complete this minor.
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Physics
http://physics.asu.edu
PSF 470
physics.info@asu.edu
480-965-3561

## Political Science Minor (ASPOLMIN)

## Campus: WEST

Description: The political science minor program is designed to help students gain an understanding of theory, practice and policy underlying political processes locally, nationally and internationally, and train students in research skills necessary for the analysis of complex sociopolitical issues locally and globally.
The program strives to meet these goals by offering students learner-centered course work in political theory, American political institutions and international relations and world affairs. These goals are accomplished by offering a flexible program of course work focusing on international urban, race/ethnic sociopolitical areas, internships and service-learning/action research opportunities. Under the direction of faculty, students throughout the degree program focus on intellectual and concrete policy issues in the greater Phoenix metropolitan area, Arizona, the Arizona-Mexico borderlands, the Americas and the world.

Program Requirements: The minor in political science consists of 18 credit hours in POS courses, 12 of which must be in upperdivision courses.

Required courses
Select two from among the following:
POS 110 Government and Politics, SB (3) or POS 310 American National Government, SB (3)
POS 150 Comparative Government, SB, G (3)
POS 160 Global Politics, SB, G (3)
POS 210 Political Ideologies, SB (3)
Political science electives* (12)

* A maximum of three credit hours of internship and three credit hours of individualized instruction may be used to fulfill requirements.

Enrollment Requirements: The minor in political science is open to all undergraduate majors. A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor. Please contact the division and visit the website for more information. Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minor.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/politicalscience
FAB S105
SBS.Dept@asu.edu
602-543-6058

## Political Science Minor (LAPOSMIN)

Campus: TEMPE

Description: The minor in political science offers students the necessary skills and knowledge to participate effectively as citizens in a democratic political system and to flourish in the rapidly developing globalization of the world's political institutions, cultures and economies. The major aims to provide students with the tools and skills necessary to make connections linking theory with real world problems and issues.

Program Requirements: The minor in political science consists of 18 credit hours in political science courses, 12 hours of which must be upper-division courses. Students who minor in political science must have two courses from among the following in addition to four POS electives:
POS 110 Government and Politics, SB (3) or POS 310 American National Government, SB (3) (but not both courses)
POS 150 Comparative Government, SB, G (3)
POS 160 Global Politics, SB, G (3)
POS 210 Political Ideologies, SB (3)
Students who minor in political science must have a minimum GPA of 2.00 for all courses that count toward the minor. Courses that count toward the minor must have a grade of "C" (2.00) or higher. No more than three credit hours of POS 484 Internship and three credit hours of POS 499 Individualized Instruction may be applied to the minor. A minimum of six upper division credit hours must be taken in residence at the Tempe campus.

Enrollment Requirements: Students who wish to pursue a minor in political science may do so with the permission of the department, school or college of their major as well as the advisor in the School of Government, Politics and Global Studies. An ASU student who is pursuing a degree at any ASU campus may elect to add a minor offered at any other ASU campus.

## Contact Information:

Liberal Arts and Sciences, College of
School of Politics and Global Studies
http://www.spgs.clas.asu.edu
COOR 6797
480-965-6551

## Psychology Minor (ASPGSMIN)

Campus: WEST

Description: Psychology is the scientific study of the behavior and mental processes of individuals and groups. The study of psychology includes basic and applied courses in the subfields of clinical, developmental, organizational, cross-cultural and social psychology, cognitive systems and behavioral neuroscience. The psychology degree prepares students for immediate employment, as well as for admission to graduate and professional schools. The program emphasizes the development of wide-ranging skills in critical thinking and reasoning, quantitative and qualitative research methods, working collaboratively on teams and presentation of information in oral and written form.

Program Requirements: The minor consists of 22 credit hours in psychology, including the following:
Foundations of Psychological Science
PGS 101 Introduction to Psychology SB (3)
PSY 230 Introduction to Statistics CS (3)
PSY 290 Research Methods L/SG (4)
Social/Developmental Core
Choose one from the following courses (3):
PGS 315 Personality Theory and Research SB (3)

PGS 341 Developmental Psychology SB (3)
PGS 350 Social Psychology SB (3)
Neuroscience Core
Choose two from the following courses* (6):
PSY 320 Learning and Motivation (3)
PSY 323 Sensation and Perception (3)
PSY 324 Memory and Cognition (3)
PSY 325 Physiological Psychology (3)
PSY 330 Statistical Methods (3)
PSY 369 Biology of Human Sexuality (3)
PSY 470 Psychopharmacology (3)
Psychology elective
PGS or PSY upper-division elective (3)

* At least one choice must be PSY 320, 323, 324 or 325. A maximum of three credit hours of research (PGS 399 Supervised Research and PGS/PSY 499 Individualized Instruction) may be used to meet the minor requirements. PGS 484 Internship may be taken for elective credit only. All courses must be passed with a minimum grade of " $C$ " ( 2.00 on a scale of 4.00 ) or higher.

Enrollment Requirements: The minor in psychology is open to all undergraduate majors. A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor. Please contact the division and see the website for more information. Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/psychology
FAB S105
SBS.Dept@asu.edu
602-543-6058

## Psychology Minor (LAPGSMIN)

Campus: TEMPE
Description: The minor in psychology focuses on appreciating and understanding the human condition from a scientific, psychological point of view. Students completing the minor in psychology should possess breadth of knowledge pertaining to the major principles, theoretical approaches and findings in psychology.
They should also understand and be able to use basic research and quantitative methods in psychology and be able to gather and synthesize psychological findings.
Finally, they should be able to understand the relevance and applicability of psychological principles, approaches and findings to individual, group and social issues. In so doing, they will be prepared as educated citizens to pursue productive careers and engage on a daily basis their increasingly complex, information-rich world.

Program Requirements: The minor in psychology consists of completing the 22 credit hours of course work in the foundations of psychology and the breadth categories described below. Six credit hours of PGS/PSY courses must be completed at the ASU Tempe or Polytechnic campuses.
Required foundation courses:
PGS 101 Introduction to Psychology
PSY 230 Introduction to Statistics
PSY 290 Research Methods
Take one course each from four of the following five clusters:
Biological
PSY 325 Physiological PsychologyPersonality/Mental Health
PGS 315 Personality Theory and Research
PGS 466 Abnormal PsychologyCognitive/Learning
PSY 320 Learning and Motivation

PSY 323 Sensation and Perception
PSY 324 Memory and CognitionDevelopmental
PGS 341 Developmental PsychologySocial
PGS 306 Environmental Psychology
PGS 350/351 Social Psychology/Honors Social Psychology
Note: If a non-psychology statistics course is approved by the Psychology Department to substitute for PSY 230, an additional psychology course (PGS or PSY prefix) must be taken to complete the 22 credit hours of required psychology course work. Internship credit and teaching assistant credit may not be used to satisfy this requirement. For more information, please contact a psychology advisor.

Enrollment Requirements: Students who wish to pursue a minor in psychology may do so with the permission of the department, school or college of their major as well as the advisor in the Department of Psychology. An ASU student who is pursuing a degree at any ASU campus may elect to add a minor offered at any other ASU campus.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Psychology
http://psychology.clas.asu.edu/undergrad/advising
PSY 255
psych.advisor@asu.edu
480-965-7258

## Public Relations and Strategic Communications Minor (HSPRSMIN)

Campus: WEST

Description: The minor in public relations and strategic communication prepares professionals with highly effective communication skills-speaking, writing, cultural sensitivity, critical thinking, problem-solving, media literacy, audience analysis and conflict management-through a number of academic program options.

Program Requirements: The public relations and strategic communications minor will provide students with professional and academic expertise in persuasion and campaign communication, public relations, crisis communication, special events planning, marketing, professional writing and editing (among other areas). Additionally, students will have the opportunity to refine the presentation skills needed for public and community relations. The minor consists of 18 credit hours of upper-division course work, including nine credit hours of required course work and nine credit hours of electives.
Required Core Courses
Choose three of the following courses, for a total of nine credits:
COM 319 Persuasion and Social Influence, SB (3)
COM 320 Communication and Consumerism, SB (3)
COM 353 Professional Communication (3)
COM 454 Rhetorical and Critical Approaches to Public Relations (3)

Electives (9)

Enrollment Requirements: The minor in public relations and strategic communications is open to all undergraduate majors. Students should consult with the advisors in the department of their major to determine if the minor is consistent with their educational goals. A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor. Please contact the division and see the website for more information.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/prsc
FAB S105

## Public Service and Public Policy Minor (PPPAFMIN)

## Campus: DTPHX

Description: The minor in public service and public policy is designed for students from across the university with an interest in public service and public policy issues. Course work provides basic knowledge of the field and enriches their major with an applied policy focus. Examples include students in journalism, sociology, criminology, the arts, engineering, the sciences and business. The minor has a strong professional and applied focus intended to enhance students' education and ability to seek jobs in the public sector.
The public service sector offers sustainable, exciting and fulfilling career options. With a minor in public service and public policy, students use their knowledge of the public sector as a catalyst to change the world. By understanding the challenges that government faces and being well-versed in the development of multiple, useful and realistic solutions, they can contribute to the development of our local, national and global communities.

Program Requirements: The minor in public service and public policy requires 18 credit hours.
Students must take 12 credits (four courses) of required courses in public service and public policy:
PAF 200 Public Service and Policy in the 21st Century
PAF 300 Public management and administration
PAF 340 Contemporary Policy Challenges
PAF 400 Senior Capstone Project
Students must select six credits (two courses) from the following electives:
PAF 201 Economics and Public Policy
PAF 410 Building Leadership skills
PAF 420 Public Leadership
PAF 470 Topics in public economics and financial management
PAF 471 Public policy analysis
URB 300 Urban and Metropolitan Studies
URB 305 Urban Governance
Other related electives may be selected with advisor approval
Enrollment Requirements: A total of 12 credit hours must be taken in the School of Public Affairs at ASU. These include three of the required courses (PAF 300, 340, and 400) and one of the upper-division electives.
To earn the minor, students must complete all course work in the in minor with a minimum grade of " C "
(2.00) or higher.

A student wishing to pursue a minor should consult with an academic advisor in the unit offering the minor to ensure that the appropriate courses are taken. Students should also consult with an academic advisor in the college or department of his/her major to ensure the college or department of the major recognizes the minor.

## Contact Information:

Public Programs, College of
School of Public Affairs
http://spa.asu.edu/new/explore.htm
UCENT 400
602-496-0450

## Real Estate Minor (BAREAMIN)

Campus: TEMPE
Description: A minor in real estate is designed to provide an understanding of the real estate industry and to complement the major area of study. The minor consists of a strong foundation including real estate fundamentals, law, appraisal and land development. Students may choose from a variety of courses from investing to economics to urban issues to complement the foundation. Students who complete the minor will have established a competitive knowledge base for careers in the real estate industry.

Program Requirements: Students must complete a minimum of 18 credit hours including 12 hours of required courses and six hours of electives.

Students must complete a minimum of 12 hours of resident credit for the minor. All courses must be completed with a grade of " $C$ " (2.00) or higher.

The upper division business courses required or elected for this minor will be restricted to students with 56 earned credit hours, a minimum 2.50 ASU GPA and completed course prerequisites.
Upper-Division Courses (12 credit hours required)
LES 411 Real Estate Law
REA 380 Real Estate Fundamentals
REA 401 Real Estate Appraisal
REA 441 Real Estate Land Development
Elective Courses (6 credit hours required)
CON 472 Developmental Feasibility Reports
DSC 100 Intro to Environmental Design
GCU 361 Urban Geography
PUP 434 Urban Land Economics
REA 456 Real Estate Investments
SGS 310 Global Urban Systems
SOS 325 The Economics of Sustainability
URB 300 Urban and Metropolitan Studies

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Business, W. P. Carey School of
Department of Finance
http://wpcarey.asu.edu/undergraduate/index.cfm
BA 109
wpcareyug@asu.edu
480-965-4227

## Recreation Management Minor (PPRECMIN)

Campus: DTPHX
Description: The minor in recreation management introduces students to community recreation programming and planning for a variety of populations. The minor allows students enrolled in other undergraduate programs at ASU to broaden their educational experiences. Students from such various disciplines including business, education, nursing, public affairs, social work and many others might find this program a beneficial supplement to their existing program. Students interested in the recreation management minor may also be interested in the school's therapeutic recreation program.

Program Requirements: The recreation management minor requires completion of 15 credit hours, six credit hours of required courses and nine credit hours of elective courses. A verification of minor form, available through the school's website is required.
Required core courses (6)
PRM 120 Leisure and the Quality of Life (3)
PRM 303 Program Planning (L) (3)

Choose three elective courses from the following (9)
PRM 302 Inclusive Community Development (C) (3)
PRM 304 Recreation Planning and Facility Development (3)
PRM 315 Community Recreation Systems (3)

PRM 368 Sports Management (3)
PRM 475 Entrepreneurial Recreation and Tourism (3)
PRM 486 Special Events Management (3)
PRM 494 Special Topics (3)

## Standards

- Fifteen hours of graded classroom coursework (no internship, no independent study).
- A minimum "C" (2.00) grade required for all classes in the minor.
- A minimum GPA of 2.00 for those pursuing the minor, a major, or pre-major, other than Parks and Recreation Management.
- Must be a junior to take 400-level courses.
- No double counting of courses for both a major and the minor.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue the recreation management minor should consult an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Courses taken as part of a university minor may not count toward both the major degree and the minor. Students pursuing a B.S. in parks and recreation management are not eligible to complete this minor.

## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://scrd.asu.edu
UCENT 550
scrd@asu.edu
602-496-0550

## Religious Studies Minor (ASRELMIN)

Campus: WEST
Description: The minor in religious studies introduces students to the world's religious traditions and how they are used by humans to interpret experiences and find meaning. Students learn to think critically about religious world views and presuppositions, and explore the relation to contemporary challenges in the world.

Program Requirements: The minor in religious studies consists of 21 credit hours of religious studies course work, of which 18 must be upper-division hours (300-400 level). Only courses in which the student earns a minimum grade of "C" (2.00) can be counted toward the minor. Courses are to be selected in consultation with a program advisor to create a coherent and complete program of study for the minor.
Choose one from the following courses (3 credit hours):
AMS 417 Religious Traditions of the American Southwest, C (3)
REL 320 Religion in America, HU, H (3)
REL 321 Religion in America, L/HU, H (3)
REL 420 Religion in American Life and Thought (3)
Choose two from the following courses ( 6 credit hours):
ENG 424 Milton, HU (3)
HIS 363 Reformation (3)
REL 305 Ritual, Symbol and Myth (3)
REL 390 Women and World Religions, L/SB, G (3) or WST 390 Women and World Religions, L/SB, G (3)
REL 494 ST: Psychology of Religion (3) or AMS 494 ST: Psychology of Religion (3)
REL 494 ST: Science and Religion (3) or IAS 494 ST: Science and Religion (3)
Choose at least one special topics course (3 credit hours):
Select from the following prefixes: AMS, COM, IAS, REL, WST. Examples of topics may include spiritual narratives, communication as theology, testimony in a post-metaphysical world, the goddess religions and gender and the environment.

Choose three additional religious studies courses (9 credit hours):
These courses, or other approved courses, must be chosen in consultation with a program advisor and may include REL 484 Internship and/or REL 499 Individual Instruction.

Enrollment Requirements: The minor in religious studies is open to all undergraduate majors. However, students should consult with the advisors in the department of their major to determine if the minor is consistent with their educational goals. Students are encouraged to take courses outside their major and college. Please contact the department for more information.
Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Please contact the division for more information. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/minors/religiousstudies
FAB N201
harcs.dept@asu.edu
602-543-4444

## Religious Studies Minor (LARELMIN)

Campus: TEMPE

Description: Students may pursue the minor in religious studies with regional, national, hemispheric, global and a variety of thematic emphases.

Program Requirements: The minor in religious studies consists of 18 credit hours, at least 12 of which must be in the upper division. REL 207 is required. For minor verification, students must consult an advisor in the School of Historical, Philosophical \& Religious Studies.

Enrollment Requirements: Students who wish to pursue a minor in religious studies may do so with the permission of the department, school or college of their major as well as the advisor in the School of Historical, Philosophical \& Religious Studies. An ASU student who is pursuing a degree at any ASU campus may elect to add a minor offered at any other ASU campus.

## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://shprs.clas.asu.edu/religious_studies
COOR 3rd floor Advising Center
SHPRSadvising@asu.edu
480-965-5778

## Romanian Minor (LAROMMIN)

Campus: TEMPE
Description: The minor in Romanian provides students with the means to develop their interests in social cultural and political matters that are marked by a strong language dimension.

Program Requirements: The Romanian minor consists of 18 credit hours of ROM courses beyond ROM 201. This minor is structured so that it requires all ROM courses to be at the upper division (300 and above) level.

- A grade of " $C$ " (2.00) or better is required in all courses to be counted toward the minor.
- A minimum of six upper division hours in the minor must be taken in residence at ASU.
- Pass/Fail courses cannot be used for the minor.
- ROM 101 through 201 are not applicable to the minor.
- Course substitutions are permitted for Heritage speakers and other advanced speakers of Romanian.

Required courses include:
ROM 313 Intermediate Composition and Conversation I, G (3)

ROM 314 Intermediate Composition and Conversation II, G (3)
ROM 411 Advanced Spoken and Written Romanian I, G (3)
ROM 412 Advanced Spoken and Written Romanian II, G (3)
ROM 494 Advanced Romanian Grammar (3)
ROM 499 Individualized Instruction (3)
Enrollment Requirements: Students who wish to add a minor in Romanian to the bachelor's degree program they are pursuing may do so if approved by the department, school or college of the major. Please contact the school for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
LL 440
silcadvising@asu.edu
480-965-6281

## Russian Minor (LARUSMIN) <br> Campus: TEMPE

Description: Students pursuing a minor in Russian gain an understanding of the language, literature and cultures of Russian-speaking peoples and regions. There are opportunities to partake in study abroad programs, which can serve to enhance a student's minor experience and education.

Program Requirements: The Russian minor consists of any 18 credit hours of Russian courses above RUS 202. SLV 304 Computer Linguistics of the Slavic languages is able to be counted as a Russian course for purposes of the minor.

Enrollment Requirements: Students who wish to add a minor in Russian to the bachelor's degree program they are pursuing may do so if approved by the department, school or college of the major. Please contact the school for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
LL 440
silcadvising@asu.edu
480-965-6281

## Science, Technology and Society Minor (ECSTSMIN) <br> Campus: POLY

Description: The science, technology and society program offers a minor to students outside the science, technology and society major, regardless of their major field of specialization. Living in a 21st-century world is characterized by rapid technological change and uncertainty. Mastering the intricacies of the interrelationships between technology and human systems will enhance a degree in any area, and arm graduates with the insights and skills required for success in any endeavor.

Program Requirements: The minor in science, technology and society (STS) requires:

- Eighteen credit hours of course work, 12 hours of which must be STS upper-division courses.
- Students who minor in STS must have a minimum GPA of 2.00 for all courses that count toward the minor.
- Courses that count toward the minor must have a grade of "C" (2.00) or higher.
- A minimum of six upper-division hours in the minor must be taken in residence at the Polytechnic campus.

The following courses are required to complete the minor in STS:
STS 101 Introduction to Science, Technology and Society or STS 304 Science, Technology and Society
STS 110 Global Technology and Development or STS 317 Science, Technology and Global Engagement
The following courses are available to complete the STS minor:
STS 301 Research in Science and Technology Studies

STS 302 Philosophy of Science and Technology
STS 303 History of Science and Technology
STS 305 Science and Social Theory
STS 306 Social Effects of Science and Technology
STS 318 Science, Technology and Government
STS 325 Science, Technology and Public Policy
STS 328 Science, Technology and Culture
STS 329 Cultivating Technology in Newly Industrialized Countries
STS 330 Information Technology and Globalization
STS 331 Ethical Issues in Science and Technology
STS 332 Seminar: Global Issues in Science and Technology
STS 364 Science, Technology and National Security
STS 425 Law, Values, and Science and Technology
Enrollment Requirements: A GPA of 2.00 or higher is required for all resident applicants, and 2.50 for nonresident applicants.

## Contact Information:

Letters and Sciences, School of
School of Letters and Sciences
http://sls.asu.edu/
SANCA 230
sls@asu.edu
480-727-1526

## Slavic Studies Minor (LASLVMIN)

Campus: TEMPE
Description: This minor focuses on Slavic languages and cultures with a concentration in either Bosnian/Croatian/Serbian (BCS) or Polish. It is intended primarily for the students of other departments (e.g., history, cultural anthropology, music, political science, economics) whose professional interests lie in Poland or the countries of South-Eastern Europe. The program places equal emphases on languages, culture and regional studies. The minor develops limited professional linguistic proficiency in either BCS or Polish along with adequate cultural sensitivity.

Program Requirements: The minor in Slavic Studies requires 18 credit hours, including a minimum of 12 upper-division hours. Required Courses

- Any 300 or 400 level RUS, SLV, PLC, or BCS literature or culture course, G (3).
- BCS 311 and 312 Serbo-Croation Composition and Conversation (6) or PLC 311 and 312 Polish Composition and Conversation (6).
- SLV 304 Computational Linguistics of the Slavic Languages, G (3).
- SLV 440 History of the Slavic Languages, G (3).
- SLV 498 Senior Capstone Seminar, G (3).


## Notes for Minor

- A grade of "C" (2.00) or better must be achieved in all courses to be counted toward the minor.
- A minimum of six upper-division hours in the minor must be taken in residence at ASU Tempe campus.
- Course substitutions are permitted for heritage speakers and other advanced speakers of Slavic
languages. Please contact the head of the SILC faculty of German, Romanian and Slavic for more
information.
- Pass/fail courses cannot be used for the minor.
- 201 and 202 language courses are not applicable to the minor.


## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://www.asu.edu/silc
LL 440
silc@asu.edu
480-965-6281

## Small Business Minor (AGSMBMIN)

Campus: POLY

Description: The Morrison School of Management and Agribusiness offers a small business minor. The requirements for the small business minor are 15 hours of the small business core and three hours from the list of approved business-related area courses. For more information please visit our school's website.

Program Requirements: Small Business Core Courses (15)

- BUA 380 Small Business Leadership (3)
- BUA 381 Small Business Accounting and Finance (3)
- BUA 382 Small Business Sales and Market Development (3)
- BUA 383 Small Business Working Relationships (3)
- BUA 384 Small Business Operations and Planning (3)

Business-Area Related Course (3)

- For a list of classes, please visit our website.

Enrollment Requirements: The minor in small business is available to nonbusiness majors and consists of 18 credit hours, with five required courses and one business-related area course.

## Contact Information:

Technology and Innovation, College of
Morrison School of Agribusiness and Resource Mgmt
http://morrison.asu.edu/msma/bua/minor/
PRLTA 330
morrisonschool@asu.edu
480-727-1585

## Social and Behavioral Sciences Minor (ASSBSMIN)

Campus: WEST

Description: The minor offers students an interdisciplinary focus across several fields of the social and behavioral sciences, including communication, sociocultural anthropology, geography, political science, psychology and sociology.

Program Requirements: The minor consists of 18 credit hours, at least 12 credit hours of which must be in upper-division courses. All courses must be completed with a minimum grade of " C " ( 2.00 on a scale of 4.00 ). Students wishing to pursue a minor must meet with an SBS department advisor to construct a minor that reflects a particular area of specialty and interest.
Required courses are (3):
SBS 200 Introduction to Social and Behavioral Sciences, SB (3)
Select one course from the following list (3):
COM 308 Empirical Research Methods, L (3)
COM 309 Rhetorical, Interpretive, and Critical Methods in Communication (3)
SBS 302 Qualitative Methods (3)
SBS 303 Quantitative Methods (3)
SOC 391 Research Methods, L/SB (3)
PSY 290 Research Methods, L/SG (4)
Electives (12)
A maximum of three semester hours of internship and three semester hours of individualized instruction may be used to fulfill requirements. Courses approved for the 12 credit hours in the minor would come from one of the approved themes from the major.

Enrollment Requirements: The minor in social and behavioral sciences is open to all undergraduate majors. Students should consult with the advisors in the department of their major to determine if the minor is consistent with their educational goals. A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate
set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor. Please contact the division and see the website for more information.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/sbs
FAB S105
SBS.Dept@asu.edu
602-543-6058

## Social Welfare Minor (LASSWMIN)

Campus: DTPHX
Description: The social welfare minor prepares students for work in human service settings where a fundamental knowledge of human relations is required, complements careers in journalism, communications, public administration, nursing and related fields and provides a foundation for students who seek to pursue an M.S.W. The minor enhances and broadens the ability of students to analyze complex family, individual and societal problems in the context of societal values, cultural diversity and other social and economic variables. The minor also contributes to students' understanding of society and social behavior, encourages critical thinking and helps develop communication skills.

Program Requirements: Students should:

- Be at sophomore standing to take 300- or 400-level course.
- Complete 18 credit hours of graded course work (internship or independent study not applicable).
- Complete a minimum of 12 credit hours of resident credit at ASU.
- Complete SWU 171 as the prerequisite for all upper-division SWU courses.
- Earn a grade of "C" (2.00) or higher for all classes in the minor.
- Maintain a cumulative GPA of 2.00 ( 4.00 scale) or higher.
- Meet with a social welfare advisor prior to registration.
- Take a minimum of 12 credit hours of upper-division course work from the approved list.

Required courses:
SWU 171 Introduction to Social Work (3)
SWU 291 Social Service Delivery Systems (3)
SWU 432 Social Policy \& Services (3)

Select three credit hours from the list below:
SWU 374 Diversity and Oppression in Social Work Context (3)
SWU 498 Border Family and Community Asset Building Policies (3)
SWU 457 Southwest Borderlands Immigration Issues (3)
SWU 494 Immigrants and Refugees (3)
SWU 494 Spanish for Human Services (3)
SWU 455 Social Work Practice Skills with Latinos (3)
SWU 498 Lesbian/Gay Issues (3)

Select six credit hours from the following list*:
SWU 303 Micro Human Behavior Social Environment (3)
SWU 340 Macro Human Behavior Social Environment (3)
SWU 498 Pro-Seminar (3)
*Note: Student may select one additional course from the cultural diversity options above.
Lower-division credit hours required: 6
Upper-division credit hours required: 12

Enrollment Requirements: Please meet with a social welfare advisor prior to registration.

## Contact Information:

Public Programs, College of
School of Social Work
http://ssw.asu.edu
UCENT 800
social.work@asu.edu
602-496-0800

## Sociocultural Anthropology Minor (ASASBMIN)

Campus: WEST
Description: The minor is designed to provide students with a substantive understanding of the theoretical assumptions and methodological techniques underlying the field of sociocultural anthropology. Courses provide students with knowledge about and theoretical approaches to cross-cultural studies and transnational research, emphasizing culture and political economy in historical context. Specifically, students minoring in sociocultural anthropology will be expected to demonstrate knowledge and skill in the following areas:

- Anthropological approaches to and explanatory frameworks for the study of social issues in culture and political economy.
- Application of theoretical knowledge to understanding sociocultural practices across local and global contexts.
- Awareness of cultural, ethnic, gender, sexual, class and age differences and commonalties across world social formations.
- Critical thinking and analytical reasoning.
- Development of their own anthropological perspective for use in their everyday lives and future studies or employment.
- Effective oral presentation and written communication.
- Interpretation of cultural practices, social theory and social texts.
- Qualitative research methods in anthropology and other social sciences and interpretive humanities, including ethnographic field research and library research.

Program Requirements: The minor requires 18 credit hours, at least 12 of which must be in upper-division courses. Two courses, ASB 311 and SBS 302, are required. The remaining 12 credit hours may be drawn from ASB courses and from several key SBS courses. All courses must be passed with a minimum grade of "C" (2.00) or higher. Up to six credit hours of lower-division courses and three credit hours of ASB 499 Individualized Instruction may also be applied toward the minor.
Required courses:
ASB 311 Principles of Social Anthropology, SB, G, H (3)
SBS 302 Qualitative Methods (3)
Choose four from the following, for a total of 12 credits:
ASB 102 Introduction to Cultural and Social Anthropology, SB, G (3)
ASB 211 Women in Other Cultures, HU/SB, G (3)
ASB 319 Indigenous Peoples of North America (3)
ASB 339 Grassroots Social Movements, SB (3)
ASB 340 Migration and Culture, SB, G (3)
ASB 342 Mexico-U.S. Borderlands, SB (3)
ASB 346 Marriage and Family Diversity, SB, C (3)
ASB 350 Anthropology and Art, HU (3)
ASB 353 Death and Dying in a Cross-Cultural Perspective, HU/SB, G (3)
ASB 356 Central American Studies, SB, G (3)
ASB 374 Culture and Politics of the Internet (3)
ASB 389 Ethnographic Field Lab (1-6)
ASB 394 Special Topics (1-4)
ASB 440 Women in the Global Factory, SB, G (3)
ASB 441 Sexuality and Culture, SB, G (3)
ASB 442 Urban Anthropology, SB (3)
ASB 445 Globalization, Development, and Resistance, SB, G (3)
ASB 447 Citizenship, Nationalism, and Identity, SB, G (3)

Enrollment Requirements: The minor in sociocultural anthropology is open to all undergraduate majors. Students should consult with the advisors in the department of their major to determine if the minor is consistent with their educational goals. A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor. Please contact the division and see the website for more information.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/sa
FAB S105
SBS.Dept@asu.edu
602-543-6058

## Sociology Minor (ASSOCMIN)

## Campus: WEST

Description: The sociology program provides students with an understanding of theory, practice, and policy underlying issues of social change and of inequality and diversity from multiple perspectives, including race/ethnicity, gender, economic position, age, geographic location and position in the global political economy. The student minoring in sociology will learn how it enhances one's understanding of social realities and institutions at local, national and international levels, and how sociology contributes to the other social sciences and to the humanities. Students gain a basic understanding of the assumptions underlying the discipline of sociology and develop the research skills necessary for analysis of complex social issues. These objectives are met by offering a flexible program and by providing the student with individual and group experiences in working with faculty on concrete intellectual and policy issues.

Program Requirements: The minor in sociology requires 18 credit hours in sociology, of which 12 hours must be upper-division courses.
Required courses are:
SOC 101 Introductory Sociology, SB (3)
Select one of the following courses (3):
SBS 303 Quantitative Methods (3)
SBS 304 Social Statistics I, CS (3)
SOC 486 Contemporary Theory, SB (3)
SOC 390 Social Statistics I, CS (3)
SOC 391 Sociological Research, SB (3)
SOC 483 History of Social Thought, SB (3)
Additional sociology electives (12)
Enrollment Requirements: The minor in sociology is open to all undergraduate majors. Students should consult with the advisors in the department of their major to determine if the minor is consistent with their educational goals. A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor. Please contact the division and see the website for more information.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/sociology
FAB S105
SBS.Dept@asu.edu
602-543-6058

## Sociology Minor (LASOCMIN)

## Campus: TEMPE

Description: A minor in sociology from the School of Social and Family Dynamics exposes students to the basic course work and issues within the discipline. This program provides an exceptional balance to studies in psychology, communication, education, business and nursing.

Program Requirements: The minor in sociology requires 18 hours, of which 12 hours must be upper-division courses. Required courses are:
SOC 101 Introductory Sociology, SB (3)
SOC 391 Sociological Research, SB (3) or SOC 483 History of Social Thought, SB (3) or SOC 486 Contemporary Theory, SB (3) or SBS 303 Quantitative Methods (3) or SBS 304 Social Statistics I CS (3) or SOC 390 Social Statistics I CS (3)
Additional sociology electives (12)
Enrollment Requirements: Students who wish to pursue a minor in sociology may do so with the permission of the department, school or college of their major as well as the advisor in the School of Social and Family Dynamics. An ASU student who is pursuing a degree at any ASU campus may elect to add a minor offered at any other ASU campus.
Please contact the school for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social and Family Dynamics
http://ssfd.clas.asu.edu/
SS 144
email@ssfd.info
480-965-6978

## Spanish Minor (ASSPAMIN)

Campus: WEST
Description: The Spanish program consists of three emphases: language, literature and cultures. These emphases are integrated within the discipline and with other disciplines within the New College of Interdisciplinary Arts and Sciences.
The program also allows credit for internships in social and business agencies. This school-to-work experience, in addition to offering the student possible entry-level job opportunities, provides stimulating linguistic and cultural rewards outside of the campus environment.

Program Requirements: The minor in Spanish consists of 18 upper division credit hours (300-400 level).
The following courses cannot be used to fulfill requirements for the minor:

- SPA 311.
- SPA 312.
- SPA 313.
- SPA 314.
- SPA 315.
- SPA 316.
- SPA 319.
- SPA 394.
- SPA 494.

Prepratory course work may not be used to satisfy minor requirements. Preparatory course work includes:

- SPA 111.
- SPA 201.
- SPA 202 (or test equivalent to placement in Spanish composition).
- SPA 313.
- SPA 315.
- SPA 314 or SPA 316.

Students must complete all course work in the minor with a grade of "C" (2.00) or better. No pass/fail credit may be used for minor requirements.
No course may be used to satisfy more than one of these requirements. Other courses must be approved by an advisor.
Enrollment Requirements: Students wishing to pursue the Spanish minor should consult an academic advisor in the unit offering that minor to ensure that the appropriate set of courses is taken. The student should also consult with an academic advisor in the college, division, or department of his or her major to make sure they recognize the minor, and to have the minor added to the program of study.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Please contact the division for more information.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/minors/spanish
FAB N201
harcs.dept@asu.edu
602-543-4444

## Spanish Minor (LASPAMIN)

## Campus: TEMPE

Description: Students pursuing a minor in Spanish gain an understanding of the language, literature, and cultures of Spanish speaking peoples and regions. There are opportunities to partake in study abroad programs, which can serve to enhance a student's minor experience and education.

Program Requirements: The minor in Spanish requires a minimum of 18 upper-division credit hours. Course substitutions are allowed for heritage and advanced speakers of the language.
Required courses are:
SPA 325 Introduction to Hispanic Literature, HU (3)
SPA 412 Advanced Conversation and Composition, G (3)
Choose two of the following courses (6):
SPA 425 Spanish Literature (to 1700), HU (3)
SPA 426 Spanish Literature (from 1700), HU (3)
SPA 427 Spanish American Literature (to 1880), L (3)
SPA 428 Spanish American Literature (from 1880), L, G (3)
SPA 464 Mexican American Literature, HU (3)
Choose one of the following courses (3):
SPA 471 Civilization of the Spanish Southwest, L/HU, C (3)
SPA 472 Spanish American Civilization, HU, G, H (3
SPA 473 Spanish Civilization, HU/SB, G (3)
Choose one from the following courses (3):
SPA 394 Special Topics (3)
SPA 413 Advanced Spanish Grammar (3)
SPA 429 Mexican Literature (3)
SPA 434 Drama of the Golden Age (3)
SPA 435 Cervantes (3)

Enrollment Requirements: Students who wish to add the minor in Spanish to the degree they are currently pursuing may do so if approved by the major department, school or college. Please contact the School of International Letters and Cultures for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
LL 440
silcadvising@asu.edu
480-965-6281

## Spanish Minor (LSSPAMIN)

## Campus: DTPHX

Description: The series of courses in this 18-credit-hour minor will help students hone Spanish communication skills and cultural knowledge to serve the needs of the U.S. Latino community in professional settings (i.e., education, social work, health care, criminology, journalism). This program is only offered on the ASU Downtown Phoenix campus and is focused on serving the needs of the students in the College of Public Programs, the College of Nursing and Health Innovation, the Mary Lou Fulton Teachers College, and the Walter Cronkite School of Journalism and Mass Communication. The combination of professionally focused courses and practical experience in this minor will enhance students' professional preparation for employment in positions that require advanced proficiency in Spanish and an in-depth understanding of U.S.-Latino culture.

Program Requirements: Prerequisite: SPA 314/316 or permission of instructor.
SPA 494/401
SPA 494/402
SPA 494/403*
SPA 494/404*
SPA 494/405*
SPA484/SPA 499**
Internship or Independent Study
*Prerequisite: SPA 494 Spanish Oral/Written Communication for the Professions or permission of the instructor.
**Prerequisite: A minimum of 12 credit hours completed in this minor and permission of the instructor.
All courses for this minor will require a minimum grade of " $C$ " (2.00) or better to receive credit toward fulfilling minor requirements.

Enrollment Requirements: For additional admission and registration requirements, please visit the school website.

## Contact Information:

Letters and Sciences, School of
School of Letters \& Sciences
http://sls.asu.edu/lc/spanish/minor.html
UCENT 300
sls@asu.edu
602-496-4000

## Special Events Management Minor (HSEVNMIN)

Campus: DTPHX
Description: The minor in special events management is designed to offer students a solid understanding of special event programming and management. In addition to the two-tiered special event course, which provides both basic and advanced instruction as well as experiential learning opportunities through event production, students will be able to select electives to meet their interests.

The minor allows students enrolled in other undergraduate programs at ASU to broaden their educational experiences. Students from such various disciplines including business, communication and many others find this program a beneficial supplement to their existing program. For more information, access the school's website.

Program Requirements: The minor requires a total of 15 credit hours, six credit hours of required courses and nine credit hours of elective courses. A verification of minor form, available through the school's website is required.
Required Core Courses (6)
PRM 486 Special Events Management (3)
PRM 487 Advanced Special Events Management (3)
Choose three elective courses from the following (9)
NLM 300 Fundraising \& Resource Development (3)
PRM 303 Program Planning (L) (3)
PRM 304 Recreation Planning/Facility Development (3)
PRM 475 Entrepreneurial Recreation and Tourism (3)
TDM 205 Intro to Travel and Tourism (G) (3)
TDM 345 Meeting and Convention Planning (3)
TDM 350 Tourism Marketing (3)
TDM 458 International Tourism (G) (3)

## Standards

- A minimum "C" (2.00) grade required for all classes in the minor.
- A minimum GPA of 2.00 for those pursuing the minor, a major or pre-major, other than Parks and Recreation Management or Tourism Development and Management.
- Fifteen hours of graded classroom coursework (no internship, no independent study).
- Must be a junior to take 400-level courses.
- No double counting of courses for both a major and the minor.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue the special events management minor should consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Courses taken as part of a university minor may not count toward both the major degree and the minor. Students pursuing a B.S. degree in either parks \& recreation management or tourism development \& management are not eligible to complete this minor.

## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://scrd.asu.edu
UCENT 500
scrd@asu.edu
602-496-0550

## Speech and Hearing Science Minor (LASHSMIN)

Campus: TEMPE

Description: The Department of Speech and Hearing Science offers an undergraduate minor in speech and hearing science. This is an academic program with emphasis on normal aspects of speech, language and hearing.

Program Requirements: For your information, the required courses are listed below, but students are strongly encouraged to visit an advisor from the Department of Speech and Hearing Science at ASU. The minor in speech and hearing science consists of 24 credit hours with the following classes required:
SHS 105 Introduction to Human Communication Disorders (3)
SHS 250 Introduction to Phonetics (3)
SHS 310 Anatomical and Physiological Bases of Speech (3)
SHS 311 Physical and Physiological Bases of Hearing (3)
Choose one from the following:
SHS 367 Language Science, SB (3)
SHS 375 Speech Science (3)

The remainder of the credits must come from the following courses:
SHS 401 Introduction to Audiology (3)
SHS 402 Modifying Communicative Behavior (3)
SHS 465 Speech and Language Acquisition, SB (3)
SHS 470 Developmental Speech and Language Disorders (3)
SHS 485 Acquired Speech and Language Disorders (3)
SHS 496 Aural Rehabilitation (3)
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major.
Please contact the department for more information at http://shs.asu.edu/ug-minor.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Speech and Hearing Science
http://shs.asu.edu/
COOR 2215
shsadvise@asu.edu
480-965-4520

## Statistics Minor (LASTAMIN)

Campus: TEMPE

Description: The minor in statistics is recommended for students majoring in a variety of disciplines such as physics, engineering applications, business, economics, and in the life and social sciences where the need for quantification in the analysis of phenomena is strong.

Program Requirements: The minor in statistics consists of a minimum of 18-20 credit hours. Required courses include:
MAT 271 Calculus with Analytic Geometry II, MA (4) or MAT 266 Calculus for Engineers II (3)
MAT 272 Calculus with Analytic Geometry III, MA (4) or MAT 267 Calculus for Engineers III (3)
MAT 300 Mathematical Structures (3)
STP 420 Introductory Applied Statistics (3)
STP 421 Probability (3)
STP 427 Mathematical Statistics (3) or STP 429 Experimental Statistics CS (3)

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of

## Sustainability Minor (SUSUSMIN)

## Campus: TEMPE

Description: Arizona State University offers a minor in sustainability that introduces students to the problems of sustainability and enables them to understand what it is that determines the sustainability of human institutions, organizations, cultures and technologies in different environments at the local, national and international level.

Program Requirements: SOS 100: Introduction to Sustainability
SOS 300: Advanced Concepts and Integrated Approaches in Sustainability (3)
Two courses (at the 100-200 level) from two of the four sustainability theme areas:

- Coupled human-environment systems.
- Earth systems.
- Human transformation of the earth.
- Social, political and economic treatment of natural resources and environment.

Six credit hours of 300-400 level sustainability electives commensurate with student's major.
Students should consult with their major academic advisor for course selection.
Enrollment Requirements: The sustainability minor is available to students pursuing a major outside of the School of Sustainability. However, this minor is not available to business students pursuing the sustainability concentration. Students who wish to add the minor in sustainability to the degree they are currently pursuing may do so if approved by the department, school or college of their major. Students should contact their academic advisor for more information.

## Contact Information:

Sustainability, School of
School of Sustainability
http://schoolofsustainability.asu.edu/future-students/minor/

## GIOS 108

sustainabilityminor@asu.edu
480-727-6963

## Sustainable Tourism Minor (PPTDMSMIN)

Campus: DTPHX

Description: As sustainability expands in popularity as a discipline, students are looking to find ways to better understand how they can apply the principles of sustainability to their specific areas of interest. A minor in sustainable tourism development, within the School of Community Resources and Development, will allow students from any major to learn the basic concepts and theories of tourism development and management and help them to identify the ways in which tourism can contribute to sustainable development locally and globally.
The minor allows students enrolled in other undergraduate programs at ASU to broaden their educational experiences. Students from such various disciplines including sustainability, business, and many others will find this program a beneficial supplement to their existing program. Students may also choose to complete a study abroad program.

Program Requirements: The minor requires a total of 15 credit hours, 12 credit hours of required courses and three credit hours of elective. A verification of minor form is required (see a School of Community Resources and Development advisor).
Required core courses (12)
TDM 205 Introduction to Travel and Tourism
TDM 372 Tourism Planning
TDM 458 International Tourism
TDM 480 Sustainable Tourism
Electives courses (3)

PRM 475 Entrepreneurial Recreation and Tourism
TDM 394/494 Special Topics
TDM 448 Heritage and Cultural Tourism
TDM 481 Sustainable Food Management in Tourism
TDM 482 Sustainable Revenue Management in Tourism

To earn the minor:

- Students must complete all course work in the minor with a minimum grade of "C" (2.00) or higher.
- Must be a junior or higher to take 400-level courses.

Enrollment Requirements: A student wishing to pursue a minor should consult an academic advisor in the unit offering the minor to ensure that the appropriate courses are taken. Students should also consult with an academic advisor in the college or department of his or her major to ensure the college or department of the major allows the recognition of the minor.
Tourism development and management majors are not eligible to earn the minor in sustainable tourism, they should enroll in the sustainable tourism concentration within the major. Courses taken as part of a university minor may not count toward both the degree and the minor.

## Contact Information:

Public Programs, College of
College of Public Programs
http://scrd.asu.edu
UCENT 550
scrd@asu.edu
602-496-0550

## Theatre Minor (FATHEMIN)

## Campus: TEMPE

Description: Students pursuing the theatre minor will study the literatures, histories and basic production practices of theatre while having opportunities to concentrate in an area such as:

- Design and production.
- Directing and performance.
- New work development.
- Theatre and performance studies.
- Theatre for youth.

Program Requirements: The school offers a minor in theatre consisting of 22 credit hours of course work (nine credit hours must be upper division). A grade of "C" (2.00) or higher is required for all courses in the minor. All prerequisites for the minor courses must be met (see course listings). Transfer students may transfer up to nine credit hours toward the minor.
The following courses are required, for a total of 13 credit hours:
FMP 201 Film: The Creative Process I, HU (3)*
THE 100 Introduction to Theatre, HU (3)
THE 322 Theatre History and Culture, HU, H (3)
THP 101 Acting: An Introduction (3)
THP 201 Theatre Production Crew (1)
Also required are nine credit hours of upper division course work related to theatre. Choose from courses with the FMP, THE, or THP prefix. Contact the school for options and course requirements.

* Students considering a minor in film concurrently must complete an additional course in theatre or film to make up for the overlapping FMP 201 course (and THP 101, if taken for the Filmmaking Practices concentration).
Courses ordinarily limited to majors only are available to minors on a second-priority basis; that is, minors may not register for these courses early, but are allowed to register after all majors' needs have been met.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Theatre and Film
http://theatrefilm.asu.edu
GHALL 232
herbergeradvising@asu.edu
480-965-5337

## Tourism Development and Management Minor (PPTDMMIN)

Campus: DTPHX

Description: The minor in tourism development and management provides students with the planning and development skills needed to enter the largest industry in the world. Exposure to the businesses of sustainable tourism, heritage tourism and meeting and convention planning will begin to prepare students for successful careers in the fast-growing travel and tourism industry. According to both the World Tourism Organization and the World Travel and Tourism Council, the travel and tourism industry is the largest industry and employer in the world. It is the third largest industry in the United States and ranks as the second largest industry in Arizona.
The minor allows students enrolled in other undergraduate programs at ASU to broaden their educational experiences. Students from various disciplines including business, communication and many others find this program a beneficial supplement to their existing program. Having completed the minor in tourism development and management, a student may also complete a certificate in convention sales and meeting planning. For more information, access the school's website. Students may also choose to participate in a study abroad program.

Program Requirements: The tourism development and management minor requires a total of 15 credit hours, six credit hours of required courses and nine credit hours of elective courses. A verification of minor form, available through the school's website is required.
Required core courses (6)
TDM 205 Introduction to Travel and Tourism (G) (3)
TDM 480 Sustainable Tourism (3)
Choose three elective courses from the following (9)
PRM 486 Special Event Management (3)
TDM 325 Tourism Accommodations (3)
TDM 345 Meeting and Convention Planning (3)
TDM 350 Tourism Marketing (3)
TDM 386 Convention Sales and Planning
TDM 394/494 Special Topics (3)
TDM 415 Tourism Transportation Systems (3)
TDM 448 Heritage and Cultural Tourism (3)
TDM 458 International Tourism (G) (3)
Standards

- A minimum "C" (2.00) grade required for all classes in the minor.
- A minimum GPA of 2.00 for those pursuing the minor, a major or pre-major, other than Tourism Development and

Management.

- Fifteen hours of graded classroom coursework (no internship, no independent study).
- Must be a junior to take 400-level courses.
- No double counting of courses for both a major and the minor.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue the tourism development and management minor should consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor. Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Courses taken as part of a university minor may not count toward both the major degree and the minor. Students pursuing a B.S. in tourism development and management are not eligible to complete this minor.

## Contact Information:

Public Programs, College of
College of Public Programs
http://scrd.asu.edu
UCENT 550
scrd@asu.edu
602-496-0550

## Transborder Chicana/o and Latina/o Studies Minor (LACCSMIN)

Campus: Tempe
Description: The School of Transborder Studies offers an interdisciplinary degree program whose central mission is to provide a value-added environment that increases the direct participation of Chicana/o and Latina/o populations in the formation of human and capital development.
The program offers students a fundamental understanding of the many dimensions of transnational and transborder processes. These include giving students the knowledge necessary to understand the manner in which Chicana/o, Mexican and Latina/o populations are influenced by and also negotiate political, social, cultural and linguistic borders of multiple sorts.
An equally important dimension is the preparation of students to effectively function in transnational and transborder contexts and processes. Graduates will be able to traverse political borders because capital expansion is practically unlimited in time and space. Students gain skill at developing literary, policy and applied projects that benefit their communities and regions. The department's intellectual mission embraces both material, cultural and applied approaches to the study of transborder and transnational phenomena.

Program Requirements: The transborder Chicana/o and Latina/o studies minor requires 18 credit hours of TCL course work. Core Requirements
TCL 201 Transborder Society and Culture of Mexican Origin and Latina/o Populations I (3) or TCL 202 Transborder Society and Culture of Mexican Origin and Latina/o Populations II (3)
TCL 332 Mexican American History Since 1900 (3) or TCL 331 Mexican American History to 1900 (3)
It is recommended that students completing TCL 201 take TCL 332, and those completing TCL 202 take TCL 331.
Students must take the remaining 12 credit hours in upper-division TCL courses in concentrations of their choice.
Enrollment Requirements: Students who wish to pursue a minor in Transborder Chicana/o and Latina/o studies may do so with the School of Transborder Studies. An ASU student who is pursuing a degree at any ASU campus may elect to add a minor offered at any other ASU campus.
Please contact the school for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of Transborder Studies
http://sts.asu.edu/front
COOR 6635
tcls.info@asu.edu
480-965-5091

## Urban and Metropolitan Studies Minor (PPURBMIN)

Campus: DTPHX

Description: The minor in urban and metropolitan studies offers students interested in the urban environment the opportunity to explore the wide variety of issues that influence the quality of life in urban communities. Students are encouraged to learn about cities as historical, social, cultural, economic and political phenomena in order to gain a strong understanding of the complex relationships that contribute to the problems and opportunities of urban living. As the population in the state's urban areas continues to grow, so will the demand for leaders who are skilled in new and innovative ways with which to address the challenges
such growth generates. The program allows students enrolled in other undergraduate programs at ASU to broaden their educational experiences. Students from such various disciplines including planning, business, political science, nonprofit management and leadership, communication, social work, geography and many others might find this program a beneficial supplement to their existing program.

## Program Requirements:

- Fifteen hours of course work with a "C" (2.00 on a scale of 4.00) or better in each course.
- Nine hours of upper-division course work from the approved list.
- Twelve hours of residence credit at ASU.

Eligibility to pursue the minor requires a major or pre-major other than urban and metropolitan studies.
Required Courses
URB 300 Urban and Metropolitan Studies (3)
URB 305 Urban Governance (3)
Core Courses (choose two of the following):
URB 220 Introduction to Urban America (3)
URB 240 Urban Policy (3)
URB 301 Urban Research (3)
URB 302 Urban Theory (3)
URB 410 Urban Leadership and Collaborative Skills (3)
Urban Electives (select a combination of the following)
Related Urban Topics and other approved courses (see below) (3)
Students will be able to choose from a variety of related urban topics classes offered by the School of Public Affairs. Possible topics include:

- Community building and development.
- Comparative urbanism.
- Computer applications.
- Leadership and change.
- Leadership and communication.
- Policy analysis and evaluation.
- Political economy.
- Poverty and social welfare policy.
- Regionalism.
- Urban economics.

In addition, students can choose related courses offered by the School of Public Affairs or other departments.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Public Programs, College of
College of Public Programs
http://spa.asu.edu
UCENT 400
spa@asu.edu
602-496-0450

Urban Planning Minor (ARPUPMIN)

Description: The planning minor introduces students to the field of urban planning. Students can select courses that include:

- Administration.
- Comprehensive planning.
- Computer and analytical methods.
- Planning law.
- Public-policy formulation.
- Site planning.
- Socioeconomic and environmental analysis.
- Urban design.

Many students continue to specialize in planning at the graduate level. Students in planning are exposed to the theories, methods and practices of the profession.

Program Requirements: A minimum of 18 credit hours are required for the minor, 12 of which must be from 300 or 400 level courses.
Required Course: PUP 301 Introduction to Urban Planning.
The remaining 15 credit hours (nine of which must be from 300- or 400-level courses) must be chosen from the following courses:
PUP 100 Introduction to Environmental Design, HU, G, H (3)
PUP 190 Sustainable Cities, HU/SB, G (3)
PUP 200 The Planned Environment, HU, H (3)
PUP 363 History of Planning (3)
PUP 412 History of the City (3)
PUP 425 Urban Housing Analysis (3)
PUP 430 Transportation Planning and the Environment (3)
PUP 432 Planning and Development Control Law (3)
PUP 442 Environmental Planning (3)
PUP 444 Preservation Planning (3)
PUP 445 Women and Environments, C (3)
PUP 475 Environmental Impact Assessment (3)
PUP 485 International Field Studies in Planning, G (3)
The minor is open to students of all majors.
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college, school and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2 ) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college, school or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college, school or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the school for more information:
http://geoplan.asu.edu/undergraduate-studies.

## Contact Information:

Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/undergraduate-studies
COOR 5673
geoplan@asu.edu
480-965-7533

## Wellness Foundations Minor (ECEXWMIN)

Campus: DTPHX

Description: The Department of Exercise and Wellness offers this minor program to any ASU student interested in learning about health and wellness. Students will develop a greater understanding of wellness behaviors, healthy lifestyles and disease prevention.

Program Requirements: The minor in wellness foundations consists of 18 credit hours. The minor requires that students complete the following courses with a grade of "C" (2.00 on a scale of 4.00) or higher:
EXW 300 Foundations of Exercise and Wellness (3)
EXW 325 Fitness for Life (3)
EXW 342 Health Behavior Change (3)
EXW 450 Cultural and Social Issues in Exercise and Wellness (3)
EXW electives: six credit hours must be selected from the approved list of electives available in the Department of Exercise and Wellness (6)

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2 ) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/programs/wellness/undergraduate/index.htm
EAW 109
healthpromotion@asu.edu
480-727-1945

## Women and Gender Studies Minor (LAWSTMIN)

Campus: TEMPE
Description: The minor in women and gender studies provides students with an intensive interdisciplinary liberal arts education that enables them to write well, think critically and analyze problems effectively. Students take a variety of courses, including a capstone seminar requiring original research and writing and an internship that helps them prepare for life after college. Original undergraduate research is encouraged, and some courses involve students in studying community problems and formulating policy solutions.

Program Requirements: The women and gender studies minor consists of 18 credit hours, 12 of which must be in the upper division. Students take one of the following courses:
WST 100 Women and Society, SB, C (3)
WST 300 Women in Contemporary Society, SB, C (3)
Students choose one from the following courses:
WST 377 History of American Feminist Thought, C (3)
WST 378 Global Feminist Theory, L, C, G (3)
WST 380 Gender, Race and Class, SB, C (3)
Twelve additional credit hours of approved women and gender studies courses must be taken after consultation with the women and gender studies advisor. Students pursuing a minor must register at least one semester before graduation and are encouraged to meet with the women and gender studies advisor early in their course of studies.

Enrollment Requirements: Students who wish to pursue a minor in women and gender studies may do so with the permission of the department, school or college of their major as well as the advisor in the School of Social Transformation. An ASU student who is pursuing a degree at any ASU campus may elect to add a minor offered at any other ASU campus.
Please contact the School of Social Transformation for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://wgs.asu.edu/
WHALL 205
wgs.asutempe@asu.edu
480-965-2358

## Women's Studies Minor (ASWSTMIN)

## Campus: WEST

Description: The minor in women's studies, within the New College of Interdisciplinary Arts and Sciences, is an interdisciplinary program emphasizing intersectional approaches to the study of gender, race, class, ethnicity and sexuality in national and transnational contexts.

Program Requirements: The women's studies minor consists of 18 credit hours of course work, of which 15 credit hours must be upper division (300-400 level).
Core requirements (9 credit hours):
WST 100 Women, Gender and Society, SB, C (3) or WST 300 Women and Gender in Contemporary Society, SB, C (3)
WST 380 Race, Gender, and Class, SB, C (3)
WST 498 PS: Theory and Methods in Women and Gender Studies, L (3)
WST elective course work (9 credit hours).

Enrollment Requirements: Students wishing to pursue the women's studies minor should consult an academic advisor in the unit offering that minor to ensure that the appropriate set of courses is taken. The student should also consult with an academic advisor in the college, division, or department of his or her major to make sure they recognize the minor, and to have the minor added to the program of study.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Please contact the division for more information. The Academic Affairs Manual (ACD 305-12) regulates undergraduate academic minors and expressly forbids double counting of courses between majors and minors

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/minors/womenstudies
FAB N201
harcs.dept@asu.edu
602-543-4444

## Youth Services Leadership Minor (HSYSLMIN) <br> Campus: DTPHX

Description: The minor in youth services leadership is designed to explore the area of youth leadership from the perspective of those who work face-to-face with youth in a variety of settings. The minor allows students enrolled in a variety of undergraduate programs at ASU to broaden their knowledge of youth services. Students from programs such as education, nursing, social work, criminal justice and others may find this program a beneficial supplement to their existing program.

Program Requirements: The minor requires a total of 15 credit hours, nine credit hours of required courses and six credit hours of elective courses. A verification of minor form, available through the school's website.
Required Core Courses (9)
PRM 303 Program Planning (3)
PRM 394 ST: Recreation and Leisure Services for Youth Development (3)
PRM 454 Human Services for At-Risk Youth (3)

Choose two elective courses from the following (6)
CRJ 340 Juvenile Justice (3)
CRJ 441 Prevention of Crime and Delinquent Behavior (3)

CRJ 462 Gangs (3)
IAP 331 Performance, Acting, and the Individual (3)
IAP 347 Movement in Education (3)
PRM 302 Inclusive Communities (3)
PRM/NLM 451 Grant Writing (3)
PRM 484 Senior Internship for Non-majors (3)
PRM 403 Leadership and Professional Development (3)
PRM 463 Senior Internship (3)
SOC 340 Sociology of Deviant Behavior SB (3)
SPE 222 Orientation to Education in Exceptional Children SB (3)

Enrollment Requirements: A student wishing to pursue the minor in youth services leadership should consult an academic advisor in the unit offering the minor to ensure that the appropriate courses are taken. Student should also consult with an academic advisor in the college or department of his or her major to make sure the college of department of the major allows the recognition of the minor.
Courses taken as part of a university minor may not count toward both the major degree and the minor.

## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://scrd.asu.edu/
UCENT 550
scrd@asu.edu
602-496-0550

## Undergraduate Programs

## Undergraduate Certificates (Program Descriptions and Requirements)

## African and American Studies Certificate (LAAFRCERT)

Campus: TEMPE

Description: The African and African American Studies Program offers an interdisciplinary examination of the many ways in which African and African-descended peoples have created robust lives for themselves and, in turn, contributed to the creation of the modern world.
The program's mission is advanced by its core undergraduate curriculum that examines the culture, arts, history, politics, economics and current status of African Americans, Africans and the African Diaspora everywhere, especially in the Caribbean, Central America and South America.
The curriculum combines a research-based understanding of the humanities, social and behavioral sciences and the arts with practical applications (internships, community/civic engagement and research projects) to prepare students for lifelong learning, advanced study in a variety of fields, and successful careers and productive public service in an increasingly diverse society, especially in Arizona.

Program Requirements: Students will be required to complete 24 credit hours. Six credits will be a prescribed core and the remaining 18 elective hours will be selected from any of the AAAS prefixes (AFH, AFR, AFS).
Required Core Course: AFS 200 Introduction to Africa and African Diaspora Studies (3)
Elective Core Course: choose one of the following four courses.
AFH 300 Precolonial Africa (3)
AFH 305 Global History of the Trans-Atlantic Slave Trade (3)
AFS 301 Race and Racism in Africa/African Diaspora (3)
AFS 302 History of Black Women (3)

## Elective courses

The remaining 18 credit hours will be completed by selecting courses not taken to fulfill the 6 core credit hours and will be selected from any of the unit prefixes (AFH, AFR, AFS). At least 18 of the 24 credit hours must be upper division courses ( 300 or higher). All courses must have a " $C$ " (2.00) grade or higher. No course may be used to satisfy more than one requirement in the undergraduate certificate.

Enrollment Requirements: Any student admitted to study at ASU may complete a certificate. Please contact the School of Social Transformation for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://aaas.clas.asu.edu/
WILSN 140
aframstu@asu.edu
480-965-4399

## Arabic Studies Certificate (LAARBCERT)

Campus: TEMPE

Description: The certificate in Arabic studies provides students with skills that will enable and qualify them to communicate effectively in Arabic in the four areas of language acquisition:

- Listening.
- Reading.
- Speaking.
- Writing.

Simultaneously, students gain a broad knowledge and understanding of the culture, literature and traditions of the vast Arabicspeaking world.

The certificate provides critically needed educational and cultural diversity that will enrich students' undergraduate experience and prepare them for life as employees and employers.
Graduate students in the liberal arts, social sciences and humanities seeking academic or professional careers in any of the three disciplines or thematic concentrations are also expected to be attracted to this certificate because of the added advantage the program gives them in the job market given the demonstrably high need for graduates with Arabic knowledge.

Program Requirements: ASU students admitted to a degree program in any field of study would be eligible for the Arabic studies certificate program. In addition to the course work and examinations required in the major field of interest, students are responsible for fulfilling the minimum requirement of 18 hours (at least12 upper-division)to earn the Arabic studies certificate. These hours can be chosen in consultation with the certificate coordinator. A minimum grade of " $C$ " (2.00) or higher is required in each course.

Enrollment Requirements: Students must first be accepted into an appropriate degree program at ASU and will then apply directly to the director of the Arabic studies certificate in the School of International Letters and Cultures for admission into the certificate program.
The application will consist of:

- Name.
- Address.
- Phone number.
- E-mail address.
- Student ID number.
- Major.
- Year in college.
- Anticipated graduation date.
- Name of their major academic advisor.

Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/certificates
LL 440
silc@asu.edu
480-965-6281

## Asian Pacific American Studies Certificate (LAAPACERT)

## Campus: TEMPE

Description: Asian Pacific American studies is an interdisciplinary undergraduate curriculum in the School of Social Transformation that addresses the historical and contemporary experiences of Asian Americans and Pacific Islanders, what they have contributed to our society, and the complexity of racial formations in the U.S.
The curriculum is designed to help students of all ethnicities:

- Develop clear written arguments and present their perspectives effectively.
- To learn about Asian American and Pacific Islander experiences and communities in Arizona, nationally, and within a larger global context.
- To prepare students to participate in an increasingly diverse and global U.S. society.
- To think critically.

The certificate program provides students with opportunities to think critically about interethnic cooperation and conflict in the formation of social institutions and communities. The certificate program also encourages students to learn about local Asian American and Pacific Islander communities and organizations through research, courses and community internships.

Program Requirements: Students will be required to complete 18 credit hours for the certificate.Nine hourswill be a prescribed core and the remaining nine elective hours will be selected from any of the courses with an APAS prefix.
Required Core Courses (9)
APA 200 Introduction to Asian Pacific American Studies, HU/SB, C (3)

APA 360 Asian Pacific American Experience, HU/SB, C (3)
APA 484 Internship (3)
Elective Courses (9)
The remainingnine credit hourswill be completedby selecting courses not taken to fulfill the 9 required hours and will be selected from any APAS courses.
APA 210 Introduction to Ethnic Studies in the U.S.
APA 310 Asian Pacific American Arts and Culture
APA 315 Asian Pacific American Literature
APA 330 Asian Pacific American Genders and Sexualities
APA 340 Asian Pacific Americans and Media
APA 345 Asian Pacific Americans and Film
APA 360 Asian Pacific American Experience
Note: one APA 360 course is required for the core; the other sections may be repeated for credit with different topics.

- The Chinese American experience
- TheJapanese American experience
- The Filipina/oAmerican experience
- The KoreanAmerican experience
- The Pacific Islander experience
- The South Asianexperience
- The Southeast Asian experience
- The Multi-Racialexperience
- Asian American psychology

APA 394 Special Topics (may be repeated for credit with a different topic)
APA 450 Asian Pacific American Contemporary Issues
APA 484 Asian Pacific American Community Internship
APA 494 Special Topics (may be repeated for credit with a different topic)
APA 499 Individualized Instruction (1-3 credits; may be repeated for credit)
Other Requirements and Restrictions

- At least 12 of the 18 credit hours must be upper division courses ( 300 or higher).
- All courses for the certificate must have a " $C$ " (2.00) grade or higher.
- A minimum on 9 credit hours must be taken in residency at ASU.
- No course may be used to satisfy more than one requirement in the certificate.

Enrollment Requirements: Students admitted to study at Arizona State University are eligible to pursue the requirements of a certificate. In order to be admitted to the university, complete the Office of Admission online application. Please contact the School of Social Transformation for more information and see http://apas.clas.asu.edu/program/certificate.shtml.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://apas.clas.asu.edu/
WILSN 342
apas@asu.edu
480-965-9711

## Asian Studies Certificate (LAASNCERT)

## Campus: TEMPE

Description: The Asian studies certificate is offered through the Center for Asian Research. It supplements a bachelor's degree, demonstrating knowledge of an Asian language as well as general knowledge of Asian history, art, culture and society. The certificate provides students with official transcript recognition of specialization in Asian Studies related to their major area of study. An earned certificate will appear on student transcripts as an Asian study emphasis.

Program Requirements: The certificate curriculum includes 24 credit hours of course work:

- Fifteen credit hours of upper-division area studies course work in at least three disciplines outside of languages and literature courses (such as anthropology, art, geography, history, political science and religious studies).
- Nine additional credit hours may be some combination of lower- and/or upper-division courses.
- Six hours may be satisfied with language and literature courses limited to 321 and above.

In addition, certificate students must demonstrate proficiency in an Asian language at the intermediate level. The language requirement can be satisfied by completing the 201 and 202 sequence, one year of study abroad at the intermediate level, or satisfactory placement on a proficiency exam. Asian languages include:

- Chinese.
- Hindu/Urdu.
- Indonesian.
- Japanese.
- Korean.
- Thai.
- Vietnamese.

Students pursuing an Asian studies certificate may apply courses in East, South and/or Southeast Asia to meet the certificate requirements. A minimum grade of " $C$ " (2.00) is required for each course that is used to fulfill the certificate requirements.

Enrollment Requirements: There are no specific admission requirements other than a student's desire to learn about Asia. Please contact the department for more information and see http://www.asu.edu/clas/asian/certificate_undergrad.html. All advising for the certificate is done through the advising office in the School for International Letters and Cultures. Please contact silcadvising@asu.edu to schedule an appointment with an advisor.

## Contact Information:

Liberal Arts and Sciences, College of
Dean, College of Liberal Arts and Sciences
http://www.asu.edu/clas/asian/
COOR
car@asu.edu
480-965-7184

## Automotive Entrepreneurs and Leaders Certificate (BADMGCERT)

## Campus: TEMPE

Description: Students gain the knowledge and basic skills necessary to enter a career in automotive management both at the corporate level and at retail dealerships. These skills include:

- Integrating the functions of business through an in-depth examination of the largest single industry in the U.S.
- Managing customer service operations and marketing efforts.
- Managing financing and cash flow.
- Understanding consumers and human behavior.
- Understanding the impact of sustainability on product development and demand chains.

Students acquire the expertise needed to become a successful entrepreneur in any industry while focusing on personal leadership skills. Course work is focused on:

- Business management and operations.
- Current issues and trends in the automotive industry.
- The role of the sustainability revolution in the automotive industry.

Program Requirements: Students must complete a bachelor's degree from the W. P. Carey School of Business or from an approved business or economics degree program at another college or university and complete a minimum of 15 credit hours ( 12 of which must be upper division) of approved course work, including the following six hours:
MGT 494 Special Topics: Sustainable Dealership Management (3)
MGT 494 Special Topics: Business Model Elements for Auto Dealerships(3)

To complete the certificate, students select at least nine additional hours of business courses, including a three-credit-hour internship or independent study project. Courses must be approved in advance by the faculty director for the certificate program. The student must complete the 15 credit hours of course work with grades of " C " ( 2.00 on a scale of 4.00 ) or higher.

Enrollment Requirements: Courses are limited to upper division business students who have completed at least 56 credits toward a business or economics degree. Space in the certificate for Automotive Entrepreneurs and Leaders Program is limited and based on available resources. Students must submit an application. Admission criteria include GPA, career goals and application materials. Please contact the department for more information.

## Contact Information:

Business, W. P. Carey School of
Dean, W.P. Carey School of Business
https://wpcarey.asu.edu
BA 109
wpcareyug@asu.edu
480-965-4227

## Child Life Certificate (LACHLFCERT)

Campus: DTPHX, TEMPE

Description: Child life specialists are experts in child development who promote effective coping among children who face challenges related to health care and hospitalization. This cross-disciplinary program offered through the School of Community Resources and Development and the School of Social and Family Dynamics is designed to assist students to prepare for the national qualifying child life exam.
A portion of the national certification exam eligibility requirements, as outlined by the Child Life Council, are met by obtaining this certificate.

Program Requirements: The certificate requires a total of 21 credit hours. Courses taken as part of a university major may count towards both that degree and the certificate. To earn the certificate, students must complete all course work in the certificate with a minimum grade of " B " (3.00) or better.
An application to the program is required.
Required courses (21)

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CDE 337 Early Childhood Intervention (3)
CDE 450 Child Dysfunction in the Family (3)
PRM 364 Foundation in Therapeutic Recreation (3)
PRM 384 Child Life Practicum (3)
PRM 406 Program Design and Evaluation (3)
PRM 455 Play in Child Life (3)
PRM 460 Assessment and Documentation (3)
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## Standards

- A minimum "B" (3.00) grade required for all classes in the certificate.
- A minimum GPA of 3.00 for those pursuing the certificate.
- Eighteen hours of graded classroom course work (no internship, no independent study).
- Must be a junior to take 400-level courses.

Enrollment Requirements: - A minimum cumulative GPA of 3.00 is required to enroll in the certificate.

- Students wishing to pursue the child life certificate must complete two prerequisites before applying for the program: CDE 232 Human Development (3) with a grade of "B" (3.00) or higher; CDE 338 Child Development Practicum (or comparable experience working with children, as determined by certificate directors of admission).
- For additional information and application, students should consult with an academic advisor in either the School of Community Resources and Development or the School of Social and Family Dynamics.


## Contact Information:

Liberal Arts and Sciences, College of
School of Community Resources and Development, School of Social and Family Dynamics
http://ssfd.clas.asu.edu/
SS 144
email@ssfd.info
480-965-6978

## Child Nutrition Certificate (ECNTRCERC)

Campus: DTPHX, POLY
Description: This certificate program is directed toward current degree-seeking students, postbaccalaureate students and nondegree-seeking students who are seeking eligibility for the school nutrition specialist (SNS) credential offered by the School Nutrition Association.

Program Requirements: The certificate requires that students take the following courses, for a total of 31 credit hours:
BUA 381 Small Business Accounting and Finance (3)
EXW 100 or 325 Intro to Wellness or Fit for Life (3)
NTR 142 Applied Food Principles (3)
NTR 343 Food Service Purchasing (3)
NTR 344 Nutrition Services Management (3)
NTR 345 Development of Healthy Cuisines (3)
NTR 401 Field Experience (3)
NTR 445 Management of Food Service Systems (3)
NTR 448 Community Nutrition (3)
NTR 450 Nutrition in the Lifecycle I (3)
NTR 498 Seminar in Child Nutrition Programs (1)
Enrollment Requirements: To enroll in the certificate program, the applicant must be admitted to ASU as a degree-seeking or nondegree-seeking student in the Department of Nutrition. The curriculum committee of the Department of Nutrition will approve applications to the certificate program.

## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/programs/nutrition
HSC 1386
healthpromotion@asu.edu
480-727-1728

## Civic Education Certificate (LACVECERT)

Campus: TEMPE

Description: The civic education certificate is designed to contribute to the preparation of undergraduate students for careers in:

- Primary and secondary education (where the teaching of government and civics may be involved).
- Careers or voluntary participation in politics, public service, civic and social movements.
- Further education in law, journalism, business, history, sociology, political science and other fields where an understanding of questions of citizenship, leadership, community, democracy, public responsibility and ethics is crucial.

Program Requirements: The certificate does not substitute for degree requirements in any subject, including political science; rather, as a complement to the student's chosen major, the certificate program is intended to guide students to a variety of courses whose successful completion indicates their special accomplishment in the area of civic education. Students majoring in any subject at the university may be awarded the civic education certificate upon completion of the following 15 credit hours of political science courses:
POS 210 Political Ideologies, SB (3)
POS 346 Problems of Democracy, HU (3)
POS 442 American Political Thought, HU (3)
Choose one from the courses below:
POS 340 History of Political Philosophy I, HU, H (3)
POS 341 History of Political Philosophy II, HU, H (3)

POS 443 Topics in Contemporary Political Theory, HU (3)
Choose one from the courses below:
POS 110 Government and Politics, SB (3)
POS 150 Comparative Government, SB, G (3)
POS 160 Global Politics, SB, G (3)
POS 270 American Legal System, SB (3)
POS 300 Contemporary Controversies in Global Politics, SB, G (3)
POS 313 The Congress, SB (3)
POS 314 The American Presidency, SB (3)
POS 315 The Supreme Court, SB (3)
POS 330 Contemporary Controversies in Domestic Politics, SB (3)
POS 332 American Political Parties, SB (3)
POS 333 Interest Groups, SB (3)
POS 370 Law and Society, SB (3)
POS 417 The Arizona Political System, SB (3)
POS 435 Women and Politics, SB, C (3)
POS 439 Minority Group Politics in America, SB, C (3)
Certificate students must have a minimum GPA of 2.00; only courses in which students have a grade of " $C$ " (2.00) or higher count toward the certificate.

Enrollment Requirements: Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the School of Government, Politics, and Global Studies for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of Politics and Global Studies
http://spgs.clas.asu.edu
COOR 6797
480-965-6551

## Classical Studies Certificate (LACLGCERT)

Campus: TEMPE
Description: The classical studies program offers students a wide variety of opportunities to study the language, literature and culture of the ancient Greeks and Romans. The School of International Cultures and Letters offer a certificate in classical studies for those students interested in pursuing a classical education in conjunction with another major or as part of their general studies.

Program Requirements: Students admitted to undergraduate degree programs in any field are eligible for the classical studies certificate program. In addition to the course work and examinations required in the student's major, the student is responsible for fulfilling the following minimum requirements:

- Five semesters of ancient Greek (17 credit hours; GRK 301 and 302 may be repeated for credit) or Latin (19 credit hours) language and literature instruction.
- Foursemesters (12 credit hours) in courses related to classical studies (to be approved by coordinator of the certificate).
- Two of these courses (6 credit hours) must be above the 300 level.

A minimum grade of " $C$ " $(2.00)$ is required in each course leading to the certificate.
Enrollment Requirements: Students interested in the classical studies certificate program need tocontact the coordinator of the certificatebefore being accepted into the program. Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of School of International Letters and Cultures http://silc.asu.edu/undergraduate/certificates
LL 440
silc@asu.edu

## Computer Gaming Certificate (ESSCICERT)

## Campus: TEMPE

Description: The computer gaming certificate is designed to provide a game development skill set that the student can apply to domain specific applications in the student's major. Theskill set includes:

- Architecture of game engines.
- Art design and computer graphics for gaming.
- Game software development.

In this certificate program, students will learn to apply gaming technology to not only the rapidly-growing video game industry, but to business, medicine, geography, biotechnology and education. Examples of projects include creating a game architecture to help patients with:

- Building a game that teaches linear algebra by incorporating trigonometric rules into the game design.
- Creating a game that teaches correct sentence construction to early English learners.
- Creating an interactive virtual world for corporate training.
- Designing a game platform incorporating geographic information systems.
- Inventing a surgical simulation to educate medical students.
- Physical therapy.

Program Requirements: Students will complete nine credit hours of core courses including a final capstone project and nine credit hours of track courses.

## Core Courses

CPI 111 Game Development I
CPI 211 Game Development II
CPI 441 Gaming Capstone

Track Courses (choose three courses)

CIS 394 Project Management
CPI 311 Game Engine Development
CPI 321 Fundamentals of Game Art
CPI 411 Graphics for Games
CPI 412 Cognitive Systems and Intelligent Agents
CPI 421 Modeling and Texturing
CPI 422 3D Animation and Rigging
DCI 451 Design Research and Educational Gaming
EDT 329 Games, Simulations and Virtual Environments
RDG 440 Computer Gaming Learning and Literacy

Programming courses focus on how game engines work and writing software. Art courses teach the visual aspects of game design. In education courses, students will apply game design skills to achieve educational goals.

Enrollment Requirements: The computer gaming certificate is open to any student admitted to an undergraduate degree program at ASU and in good academic standing. This certificate can also be used by B.I.S. students as part of their degree program.
All students are eligible to take CPI 111.Students that want to continue in the certificate classes must be approved to enroll in the computer gaming certificate by completing the Undergraduate Certificate formfrom the Registrar's Web site and submitting it to the School of Computing, Informatics and Decision Systems Engineering (SCIDSE) Academic Advising Center located in the Brickyard Building, room 208. B.I.S. students can contact their B.I.S. advisor to add the computer gaming concentration to their degree program.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Computing and Informatics Program
http://engineering.asu.edu/cidse
BYENG 208
cidse.advising@asu.edu
480-965-3199

## Convention Sales and Meeting Planning Certificate (PPTDMCERT)

Campus: DTPHX
Description: The U.S. meetings, conventions and exhibitions industry generates more than $\$ 120$ billion a year, supporting nearly two million jobs. Students can explore this exciting growth industry with the convention sales and meeting planning certificate. The demand for professionals is strong and we provide an excellent foundation for enhancing career opportunities nationally and regionally. Phoenix is a major convention and meeting destination.
The $\$ 600$ million investment in the Phoenix Convention Center expansion, new hotel and other visitor-related product development, as well as corporate headquarters that continue to relocate to the greater Phoenix area have created the need for qualified professionals to service conventions and meetings. The certificate, which has been endorsed by the Greater Phoenix Convention and Visitors Bureau and the Arizona Sunbelt Chapter of Meeting Professionals International, will enhance a graduate's career opportunities as a tourism professional.

Program Requirements: The certificate requires a total of15 credit hours,four required core courses (12)and one elective course (3). Courses taken as part of a university major may count towards both that degree and the certificate. Requirements can be met online. All core classes and some elective classes are taught online at least once a year. To earn the certificate, students must complete all course work in the certificate with a minimum grade of "C" or better. An application to the program is required. Required core courses (12)

TDM 205 Introduction to Travel and Tourism, G (3)
TDM 345 Meeting and Convention Planning (3), prerequisite: TDM 205, grade of "C" (2.00) or better
TDM 350 Tourism Marketing (3), (prerequisites: must have completed REC 305 or TDM 205 with a grade of "C" (2.00 on a 4.00 scale) or higher or be currently enrolled; must have completed 45 hours)
TDM 386 Convention Management and Sales (3)
Choose one elective course(3)
PRM 486 Special Events Management (3)
TDM 325 Tourism Accommodations
TDM 458 International Tourism

## Standards

- A minimum "C" (2.00) grade required for all classes in the certificate.
- A minimum GPA of 2.00 for those pursuing the certificate.
- Fifteen hours of graded classroom coursework (no internship, no independent study).
- Must be a junior to take 400-level courses.

Enrollment Requirements: Students wishing to pursue the convention sales and meeting planning certificate should consult with an academic advisor in the School of Community Resources and Development. For additional information, please visit the college website.

## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://scrd.asu.edu
UCENT 550
scrd@asu.edu
602-496-0550

## Creative City Certificate (PPURBCERC)

Campus: DTPHX

Description: The creative city certificate prepares students to engage effectively in revitalizing cities and communities by tapping their inherent potential for cultural innovation, placemaking and social/economic entrepreneurship. Exploring best practices globally, students develop asset-based proposals for specific locales including implementation plans. The creative city certificate adds value to other majors as well as work/life experience for students aspiring to assume leadership roles in improving quality of life, specifically by enhancing quality of place.
Cities are centers of human creativity and cultural innovation. They both attract and breed these. Such creativity and innovation are apparent in the vitality of the arts, as well as that of businesses (both large and small), research (basic and applied) and the everyday life unique to any given locale. These are the ingredients that make our places sustainable - economically, socially and environmentally - by endowing a "sense of place" along with a "sense of community."
This certificate also serves professionals in the community working in the areas of:

- Community development.
- Land-use law.
- Parks and recreation.
- Philanthrop.
- Planning.
- Public art.
- Urban governance and others.

Flexible class times and locations make the certificate a viable option for those unable to attend classes during the day.
Program Requirements: The five-course sequence comprising the certificate will enable students to build upon their own strengths in order to help cities and communities creatively build upon their capacities. The creative city certificate consists of a maximum of 15 credit hours of course work. All courses must be taken at ASU. Required courses and electives are shown below.
Required core courses (6)
URB 405 Citizen Engagement and Community Building (3)
URB 406 Public Administration and Community Development (3)
Sample certificate electives (9)
URB 410 Urban Leadership and Collaborative Skills (3)
GRA 401 Creating Environments, this course develops individual creativity to apply in collaborative settings to urban and environmental issues (3)

URB 484 Internship (3)
Other electives
Sustainable Communities (PRM 301, NLM 301, TDM 301)
Urban Research (URB 301)
Urban Theory (URB 302)
Urban and Metropolitan Studies (URB 300)
Urban Governance (URB 305)
Senior Professional Seminar (URB 400)
Public Leadership (PAF 420)
Introduction to Urban America (URB 220)
Urban Policy (URB 240)
Heritage and Cultural Tourism (TDM 448)
Leisure and the Quality of Life (PRM 120)
Introduction to Nonprofit Organizations (NLM 220)
Fund Raising and Resource Development (NLM 300)
Assessment and Evaluation of Community Services (NLM 402, TDM 402)
Inclusive Community Development (PRD 302, NLM 302, TDM 302)- community resources and development majors only
Voluntary Action and Community Leadership (NLM 160)
Community Resources and Services (REC 210)
Living the Arts Downtown (URB 494)
Contemporary Issues Civic Enterprise (PAF 494, APA 450)

Note: Some courses may require prerequisites or may be for majors only. Other courses may be substituted with approval from School of Public Affairs.

Enrollment Requirements: The creative city certificate is available to all admitted undergraduate students (regular or nondegree) at ASU. Nondegree students are required to apply to ASU (as a nondegree student) and once admitted, contact the School of Public Affairs to be admitted into the certificate program. Students may begin taking courses before they formally apply for the certificate; however, they should apply for admission as soon as possible.

## Contact Information:

Public Programs, College of
School of Community Resources and Development, School of Public Affairs
http://spa.asu.edu/new/undergrad/creative_city.htm
UCENT 400
spa@asu.edu
602-496-0450

## Dietetics Certificate (ECNTRCERD)

Campus: DTPHX, POLY

Description: This certificate program is directed toward postbaccalaureate students who are seeking eligibility for registration as a dietitian. The certificate provides students with documentation that they have completed a limited curriculum and achieved a standardized level of competence in dietetics. The certificate requires 79 hours of specific course work. The program will be administered by the Department of Nutrition curriculum committee. Completion of the certificate will enable students to receive a verification statement from the Commission on Accreditation for Dietetics Education's Didactic Program in Dietetics, which will allow students to apply to dietetic internship programs to obtain the registered dietitian (R.D.) credential.

Program Requirements: Required course work includes:
BCH 361 and 367 Biochemistry with lab (or equivalent)
BIO 201 Human Anatomy/Physiology I with lab (or equivalent)
BIO 202 Human Anatomy/Physiology II with lab (or equivalent)
CHM 113 General Chemistry I with lab (or equivalent)
CHM 116 General Chemistry II with lab (or equivalent)
CHM 231 and 235 Organic Chemistry with lab (or equivalent)
ENG 301 Technical or Professional Writing (or equivalent)
MIC 205 and 206 Microbiology with lab (or equivalent)
NTR 142 Applied Food Principles
NTR 241 Human Nutrition
NTR 340 Applications in Human Nutrition
NTR 341 Introduction to Planning Therapeutic Diets
NTR 343 Food Service Purchasing
NTR 344 Nutrition Services Management
NTR 350 Nutrition Counseling
NTR 440 Advanced Human Nutrition I (Micronutrients)
NTR 441 Advanced Human Nutrition II (Macronutrients)
NTR 444 Medical Nutrition Therapy
NTR 445 Management of Food Service Systems
NTR 446 Human Nutrition Assessment Lecture/Lab
NTR 448 Community Nutrition
PGS 101 Introductory Psychology (or equivalent)
SOC 101 Introductory Sociology (or equivalent)
Statistics
Enrollment Requirements: To enroll in the certificate program, the applicant must be admitted to ASU as a nondegree graduate student or as an undergraduate student in the Department of Nutrition. The applicant must have already completed a bachelor's degree not specific to dietetics. The curriculum committee of the Department of Nutrition will approve applications to the certification program. The department director will verify that the program of study has been successfully completed and that all grade requirements have been satisfied. Notification will then be sent to the graduation office to post the certificate on the student's transcript.

## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/programs/nutrition
HSC 1386
healthpromotion@asu.edu
480-727-1728

## Digital Culture Certificate (HIDGCCERT)

Campus: TEMPE
Description: The digital culture certificate program in the Herberger Institute for Design and the Arts focuses on the creative exploration of how new media is influencing our culture, or rather, the way we live, learn, create and communicate. The digital culture certificate will allow students to enhance their program of study with integrated, interdisciplinary training in creative processes and technical skills in new media with cultural applications. The digital culture curriculum is outcomes-based rather than course sequence based. The curriculum uses an innovative proficiency-based network to connect courses across academic disciplines, instead of traditional methods such as course prerequisites. Proficiencies in the curriculum identify common generalized learning outcomes across disciplines participating in the initiative.

Program Requirements: The digital culture certificate requires 18 credit hours (12 upper division) in four areas:Digital Culture Core (9)Media Arts and Design (3)Media Engineering (3)Capstone Culminating Project (3)A minimum grade of a "C" (2.00) and an overall GPA of 3.00 is required in all classes in the certificate. Courses in the certificate may not be used as part of a major. All upper division certificate course work must be taken at ASU.Generous substitution rules allow for course flexibility. Students receiving the digital culture certificate can petition to substitute up to six credit hours. Three credit hours can come from any course related to digital culture and may be achieved through courses offered by any unit of ASU including the Polytechnic, Downtown, West (IAP), and the FMS program on the Tempe campus. Courses may include any on the related subject/substitution list (below) or courses with comparable content. The other three substitution hours can be achieved through one of the following two paths:

- The three-hour media arts and design course requirement may be substituted with a three-hour course in the digital culture related category.
- The three-hour media engineering requirement may be substituted with a three-hour course in the digital culture related category, or by a related upper-level engineering course offered by one of the collaborating units.

Enrollment Requirements: For current ASU students, there is no special application process for the digital culture certificate. Students add the certificate by meeting with the academic advisor for their major and the digital culture education coordinator to develop the digital culture pathway that best meets the proficiencies for the work they are interested in pursuing. This pathway will be contingent upon the student's academic performance in 100-level course work. For students not currently enrolled at ASU, students must apply and be admitted to ASU in a degree or non-degree program. Students must meet with the digital culture education coordinator before enrolling in the certificate program. The coordinator and student will develop a pathway that best meets the proficiencies for the work he or she is interested in pursuing. The coordinator will review the student's previous academic work to determine which proficiencies the student has completed.Digital culture certificate students will work with the digital culture education coordinator and successfully complete the required sequence of courses and proficiencies for a digital culture certificate. The digital culture education coordinator and the digital culture faculty committee in the Herberger Institute for Design and the Arts will help to craft the best path for the student.

## Contact Information:

Design and the Arts, Herberger Institute for
Arts, Media and Engineering Sch T
http://herbergerinstitute.asu.edu/degrees/digital_culture/minor.php
CDS 101
480-965-4495

## East Asian Studies Certificate (LAEASCERT)

## Campus: TEMPE

Description: The certificate in East Asian studies can supplement a bachelor's degree, demonstrating knowledge of an Asian language as well as knowledge of Asian history, art, culture or society. This certificate helps prepares students for admission to graduate programs in Asian area studies or in an academic discipline with an Asian focus, or for professional programs in
international law or business. Recent Asian studies graduates have gone on to enter medical school, law school, M.B.A. programs or Ph.D. programs. An earned certificate will appear on student transcripts as an East Asian studies emphasis.

Program Requirements: The certificate curriculum includes 24 credit hours of course work:

- Fifteen credit hours of upper-division area studies course work in at least three disciplines outside of languages and literature courses (such as anthropology, art, geography, history, political science and religious studies).
- Nine credit hours may be some combination of lower- and/or upper-division courses (six hours may be satisfied with language and literature courses limited to 321 and above).
- In addition, certificate students must demonstrate proficiency in an Asian language at the intermediate level. The language requirement can be satisfied by one of the following:
- Completing the 201 and 202 sequence
- One year of study abroad at the intermediate level
- Satisfactory placement on a proficiency exam.

Asian languages include:

- Chinese.
- Hindu/Urdu.
- Indonesian.
- Japanese.
- Korean.
- Thai.
- Vietnamese.

Students pursuing an East Asian studies certificate must fulfill the language requirement in either Chinese, Japanese or Korean, and the 15 hours of upper-division course work must be courses with significant focus on East Asia chosen in consultation with the Center for Asian Research advisor.
A minimum grade of " C " (2.00) is required for each course that is used to fulfill the certificate requirements.
Enrollment Requirements: There are no specific admission requirements other than a student's desire to learn about East Asia. Please contact the department for more information and see http://www.asu.edu/clas/asian/certificate_undergrad.html. All advising for this certificate is done through the School for International Letters and Cultures. Please contact silcadvising@asu.edu to schedule an appointment with an advisor.

## Contact Information:

Liberal Arts and Sciences, College of
Dean, College of Liberal Arts and Sciences
http://www.asu.edu/clas/asian/
COOR
car@asu.edu
480-965-7184

## Economic Justice Certificate (LAECNJCERT) <br> Campus: TEMPE

Description: This certificate focuses on the application of justice principles to different fields of economics, including microeconomics, macroeconomics, labor economics, public finance, development, and international trade and investment, among others.

Students will gain transdisciplinary knowledge of economic justice that will promote the growth of sustainable communities, locally, nationally and globally. Areas of focus include different approaches to economic justice, wealth and poverty, labor movements and unionization, social innovation, legal constructions of labor justice and forms of work discrimination, employment and welfare advocacy and activism.

The course work in this certificate will prepare students to:

- Analyze and develop policies to build local skills.
- Develop the capacity to design, control, manage, and evaluate initiatives aimed at economically revitalizing communities.
- Increase research abilities.
- Lay the groundwork for new approaches to economic justice.

Program Requirements: 18 total credit hours required for the certificate.

- "C" grade or higher required for each course.


## 1. Theories and Foundation in Economic Justice (3 hours)

To provide student with a background in theories and philosophies of economic justice, student will select one of the following courses:

ASB 416: Economic Anthropology
COM 450: Theory and Research in Organizational Communication
ECN 360: Economic Development
JUS 321: Wealth Distribution and Poverty
JUS 323: Justice and Development of the Welfare State
JUS 325: Globalization and Economic Justice

## 2. Economic Justice Praxis (3 hours):

To better understand community, NGOs, government policies and other collective efforts aimed at improving economic conditions through various strategies, including asset building to low income communities, community based micro-finance, economic development, and advocacy and training efforts. Students will select one of the following courses:

AIS 394: Indigenous Nation Building/Com/Econ Development
ASB 328: Rules, Games and Society
JUS 320: Community and Social Justice
JUS 405: Economic Justice
ECN 331: Economics of the European Economic Union
PUP 434: Urban Land Economics
SGS 394: Principles for Economic Development and Globalization
SGS 394: Policies for Economic Development (soon to be SGS 352
SWU 432: Social Policy and Services
SWU 498: Border Families: Community Asset Building

## 3. Interdisciplinary Component (9 hours):

To provide students an opportunity to focus on a particular racial group, nation or region or specific historical event while also providing a broad interdisciplinary framework, students will select three electives. Courses must be taken from both of the substantive areas listed below, and from two or more academic units. Any course listed below may count toward this requirement, as well as other courses as approved by the certificate program director.

AIS 380: Contemporary Issues of American Indian Nations
AIS 494: Readings in Decolonization
APA 394: Asian Pacific Americans and Immigration
APA 394: Inequality and Diversity in Education (soon to be APA 350)
ASB/POS/SGS 447: Citizenship, Nationalism, and Identity
CRJ 305: Women, Crime and Justice
CRJ 306: Race, Ethnicity and Justice
ETH 300: Principles of Ethnic Studies
FAS/AFS 370: Family, Ethnic and Cultural Diversity
HST 325: Immigration \& Ethnicity in the United States
HST 333: African American History to 1865
IAS 305: Work and Identity
JUS 420: Women, Work and Justice
JUS 415: Gender and International Development
JUS 425: Race, Gender and Justice
JUS 438: Human Differences: Dilemmas of Justice
JUS 479: Law and DisputingSOC/FAS 324: Work and the Workplace
SOC 423: Social Class and Stratification
SWU 374: Diversity and Oppression in a Social Work Context

TCL 314: Transborder Regional Immigration and Economy
WST 394: Women, Work and Poverty
National and Global:
AFS 304: Islands of Globalization: Caribbean Politics and Political Economy
ASB/SOC/SBS: 342: Mexico-United States Borderlands
JUS 408: Comparative Development of the Welfare State
JUS 469: Political Deviance and the Law
PHI 309: Social and Political Philosophy
POS: 80: Global Justice
POS 486: International Political Economy
SGS 394: Principles of Economic Development and Globalization SGS 394: Global Markets
SOS 430: Sustainable Economic Development and Social Transformation
TCL 444: The Ethnography of Mexico and the Borderlands

## 4. Experiential Learning Component (3 hours):

A central element of this certificate program will be the linkage of learning and doing; connection theoretical and substantive learning about economic justice with practical knowledge about the workings workings of organizations and institutions seeking to address poverty and the wealth gap. To better connect connect classroom learning with practical experience, students will be required to participate in either a for-credit internship or a Research Experience with Undergraduates (REU) under faculty supervision (honors thesis may substitute). A written component to the internship or REU is required.

Enrollment Requirements: In order to declare this certificate, students must have a minimum of 56 earned credit hours and must first meet with an academic advisor.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://justice.clas.asu.edu/
WHALL 125
480-965-7682

## Entertainment and Technology Certificate (LAFMSUERE)

Campus: TEMPE
Description: The entertainment and technology certificate is for students who have completed a course of study that includes 18 credit hours of entertainment and technology history, theory and convergence. It certifies that the student has had the training to analyze industry changes through time, to identify current industry trends and to develop likely entertainment and technology models and scenarios for the future.

Program Requirements: ASU students admitted to a degree program in any field of study are eligible for the entertainment and technology certificate. In addition to the course work and examinations required in the major field of interest, students are responsible for fulfilling the requirement of 18 credit hours to earn the certificate. The upper-division courses are a three-course sequence and are taken upon completion of three lower-division film and media studies courses. A minimum grade of " C " (2.00) or better is required in each course. Required certificate core courses (18 credit hours) are:
FMS 100 Introduction to Film (3), HU
FMS 110 Introduction to New Media (3), L or HU
FMS 200 Film History (3), (L of HU) and H
FMS 481 Entertainment Technologies (3)
FMS 482 Entertainment Industries (3)
FMS 483 Techno-Entertainment Convergences (3)
FMS Upper division elective

Enrollment Requirements: Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the department for more information and see http://film.asu.edu/entertech.

Liberal Arts and Sciences, College of
Department of English
http://film.asu.edu/certificates
LL 641
filminfo@asu.edu
480-965-6747

## Environmental Humanities Certificate (LAENHCERT)

Campus: TEMPE
Description: The environmental humanities certificate offers students who are interested in humanities-based approaches to the current global environmental crisis an option to focus in this vital area of study. Students take three ENG/ENH courses and four electives from selected programs that arefocused whollyor in large-part on the human relationship to the environment and the relationship between nature and culture. To gain practical experience, certificate students also complete a required English internship in environmental activism, policy development, education or other pertinent areas.

Program Requirements: The environmental humanities certificate consists of 24 hours, of which at least 12 hours must be upperdivision.
Core Required Courses (9)
Complete three English courses from the list below. Note: other ENG courses may be approved by an English advisor depending on special- or variable-topics courses available in given semesters.
ENG 334The American Southwest in Literature and Film(L/HU) (3)
ENG 359 American Indian Literatures (L/HU, C)(3)
ENG/TCL 363 Transborder Mexican and Chicano/a Literature of Southwest North America (L/HU, C)(3)
ENG 367 Environmental Issues in Literature and Film (L/HU) (3)
ENG 370/BIO 315Science, Values, and the Public (3)
ENG 371 Rhetoric of the Environmental Movement (3)
ENG 378 Environmental Creative Nonfiction (L/HU) (3)
ENG 468 EnvironmentalLiterary Criticism(L/HU) (3)
ENG 469 Science and Literature (may be repeated when topics vary) (L/HU) (3)
Internship (3)
ENG 484 Undergraduate Internship: Environmental Humanities Certificate (3)
If an environmental internship is not feasible, a student may petition to substitute 1) an ENG 499 Independent Study on an environmental studies applied project or literature/writing topic, or 2 ) an ENG 400-level course in environmental literature/writing. Electives (12)
Complete four additional courses (see advisor for approved list). Note: some courses are limited to students majoring in the discipline, have prerequisites or cannot be taken in combination with another course on the list. Additional courses may be approved by English advisor depending on special- or variable-topics courses available in given semesters.

Enrollment Requirements: For more information aboutthe environmental humanities certificate, contact an advisor in the Department of English.

## Contact Information:

Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/
LL 542
englishadvising@asu.edu
480-965-3168

## Ethics Certificate (LAETHCERT)

Campus: TEMPE

Description: The ethics certificate is designed to give students a richer understanding of systematic philosophical thinking about ethics. Students with majors in business, nursing, journalism and public administration, and students planning to pursue legal careers, among others, may well find that training in ethics is beneficial to their career goals. The certificate program permits some flexibility regarding course selection, thereby facilitating particular student interests.

Program Requirements: The certificate in ethics consists of 18 credit hours approved by the undergraduate advisor in the School of Historical, Philosophical and Religious Studies. The student must take PHI 305 or PHI 335. At least 15 credit hours must be chosen from PHI 105, 304, 305, 306, 307, 309, 310, 320, 335, 360and (when its topic is within ethics) PHI 420. One course outside this list, and perhaps outside the school, may be used with written approval from the director of undergraduate studies. All courses must be passed with a minimum grade of " $C$ " (2.00).

Enrollment Requirements: Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the School of Historical, Philosophical and Religious Studiesfor more information.

## Contact Information:

Liberal Arts and Sciences, College of Historical, Philosophical \& Religious Studies, Sch
http://shprs.clas.asu.edu/ethics
COOR 3rd floor Advising Center
SHPRSadvising@asu.edu
480-965-8364

## Ethnic Studies Certificate (ASETHCERT)

Campus: WEST
Description: This certificate is designed for students who plan to work and live in ethnically diverse communities and seek to acquire the skills for understanding the complexities of race, class and gender at a local or national level. It is expected that students in the certificate program will be able to think both analytically and creatively about ethnicity in the U.S. The certificate is strongly recommended for students who plan to enter a wide variety of jobs in business, health professions, the criminal justice system, social services, education, public relations, community development, public policy or government. It is also valuable for students preparing for further graduate study.

Program Requirements: A certificate in ethnic studies is awarded for successful completion of 21 credit hours, including ETH 300 and 18 credit hours of elective courses from the approved course list. The certificate program is recommended for graduate students, non-degree students and students majoring in professional programs.

Enrollment Requirements: Students wishing to pursue the ethnic studies certificate should consult an academic advisor in the unit offering that certificate to ensure that the appropriate set of courses is taken and required paperwork submitted.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/certificates/erfns
FAB N201
harcs.dept@asu.edu
602-543-4444

## Family Communication Certificate (ASFAMCCERT)

Campus: WEST
Description: The family communication certificate offers students an opportunity to specialize their studies on issues regarding communication in the family. The certificate complements the current communication program by bringing together a broad array of courses that have family implications, such as courses in new media and health. In addition, students are encouraged to take courses in other disciplines that complement family-related communication courses.

Program Requirements: The family communication certificate offers students an opportunity to specialize their studies on issues regarding communication in the family. The certificate consists of 19 credit hours: 12 credits must be upper division, six must be non-communication credits, and a one credit exit portfolio course is to be taken after a minimum of 12 credits have been completed. Twelve of the 19 credits must be ASU credit. Six credits may be double counted with one's ASU major. Each class must be passed with a "C" (2.00) or better.

- Core Course (6).

Required:
COM 411 Comm in the Family
Select one:
COM 312 Conflict and Negotiation
COM 410 Interpersonal Comm
COM 417 Comm and Aging

- Four courses must be selected from at least two content areas listed below (12).

Social and Cultural Elements of the Family
AFS 370 Family, Ethnic and Cultural Diversity
ASB 346 Marriage and Family Diversity
COM 316 Gender and Communication
COM 410 Interpersonal Communication
FAS 301 Introduction to Parenting
FAS 331 Marriage and Family Relationships
FAS 370 Family, Ethnic \& Cultural Diversity
FAS 435 Advanced Marriage and Family Relationships
SBS 440 Family Studies
SOC 415 The Family

Technology, Media and the Family

COM 424 Television Studies
COM 457 New Media
ENG 244 Intro Research Family History
ENH 243 Intro to Writing Family History
MCO 473 Sex, Love, and Romance in the Mass Media
Health and Family Development
ALD 403 Aging, Lifespan Development, and the Family
ALD 420 Health Issues and Older Adults
ALD 431 Caregiving for Older Adults
CDE 430 Infant/Toddler Development in the Family
CDE 437 Infant Family Assessment and Observation
COM 417 Aging
CRJ 340 Juvenile Justice
FAS 332 Human Sexuality
FAS 431 Parent-Adolescent Relationships
FAS 436 Sexuality in Mid-Life and Beyond
PGS 341 Developmental Psychology
PGS 443 Abnormal Child Psychology
PGS 444 Adolescent Psychology and Psychopathology
SOC 312 Sociology of Adolescence
SOC 417 Family Violence
Community Application
COM 484 Internship (in consultation with FCC advisor)
COM 498 Inner City Families: Cycle of Poverty
COM 498 Inner City Families: Special Topics

- COM 498 Seminar Family Communication Portfolio (1).

This course is a synthesis of students' family communication academic experience. The portfolio itself integrates each student's family communication experience with theory and concepts from family communication courses. The portfolio may take a variety of forms, to be negotiated by each student with the instructor. This course is to be taken after a minimum of 12 credits toward the certificate have been completed.

- Substitutions allowed with faculty advisor approval.


## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Social and Behavioral Sciences
http://famcom.asu.edu/
FAB S110
SBS.Dept@asu.edu
602-543-6058

## Film and Video Studies Certificate (ASVIDCERT)

Campus: WEST
Description: The certificate in film and video studies explores theory and practice in the general field of the moving image. This interdisciplinary program provides students an opportunity to develop interests, skills and knowledge of the forms, channels, technologies and histories of the media arts. Students may pursue focused interests in film studies or adopt a more generalized approach to visual media through television, film and video.
The program is useful to students who may pursue careers in broadcasting, writing and public relations, and degrees in production, film studies, media studies, performance studies and communication studies. Courses in the film and video studies certificate are designed to:

- Develop astute and discriminating critics and analysts of film and media arts.
- Strengthen critical thinking through an awareness of the philosophical, aesthetic, political and technological debates in film, media and video studies.
- Develop knowledge of the history of film, television and the video arts as dynamic forces of social, cultural and political expression.
- Develop practical skills that enable students to be competitive in film, video, television and media-related production industries.

Program Requirements: A certificate in film and video studies is awarded for the successful completion of the 21 credit hours, 15 of which must be upper division (300-400 level). Students choose a focus in media and video studies or film studies.

Enrollment Requirements: The certificate in film and video studies is open to all undergraduate majors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/certificates/film
FAB N201
harcs.dept@asu.edu
602-543-4444

## Geographic Information Science Certificate (LAGISCERT)

Campus: TEMPE

Description: The geographic information science (GIS) certificate program is a structured interdisciplinary program. It is built on GIS course work currently being taught at ASU. Students who earn the certificate exit the program with standardized skill sets based on learning outcomes associated with each required course.

Program Requirements: The certificate is awarded to students completing the following 19 credit hours with a grade of " C " (2.00) or higher.
Required courses
CSE 100 Principles of Programming with C++, CS (3) or CSE 110 Principles of Programming with Java, CS (3)
GCU 495 Quantitative Methods in Geography, CS (3)
GPH 370 Geographic Information Technologies, CS (3)
GPH 373 Geographic Information Science I, CS (4)
GPH 473 Geographic Information Science II, CS (3)
Electives(3)
ABS 485 GIS in Natural Resources (3)
ABS 586 Remote Sensing in Environmental Resources (4)
GCU 361 Urban Geography, SB (3)

GCU 441 Economic Geography, SB (3)
GCU 442 Geographical Analysis of Transportation, SB (3)
GPH 371 Introduction to Cartography and Georepresentation, CS (3)
GPH 372 Air Photo Interpretation (3)
GPH 471 Geographics: Interactive and Animated Cartography and Geovisualization, CS (3)
GPH 481 Environmental Geography (3)
GPH 483 Geographic Information Analysis (3)
GPH 484 Internship: GIS-Based (3)
PLB 434 Landscape Ecological Analysis and Modeling (3)
Enrollment Requirements: Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the school for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/undergrad-gis-certificate
COOR 5673
geoplan@asu.edu
480-965-7533

## Hazardous Materials and Waste Management Certificate (TSETMCERT) <br> Campus: POLY

Description: The certificate program in hazardous materials and waste management is designed to provide current and prospective employees of industry and government with a comprehensive and practical curriculum of study in hazardous materials management. The certificate program features instruction by faculty, attorneys and professionals who work in the specific area in which they teach. Participation in the certificate program is available in three options:

- A B.S. in environmental technology management with a certificate in hazardous materials and waste management.
- A certificate program for nondegree students.
- An M.S.Tech. with a certificate in hazardous materials and waste management.

Program Requirements: Students must complete seven selected courses (five required and two electives) and earn a grade of "C" (2.00) or higher to receive the certificate. Except for the introductory course, ETM 501 Principles of Hazardous Materials and Waste Management (ETM 401 for undergraduates), the remainder of the courses may be taken in any sequence.

Enrollment Requirements: Please contact the department for more information. For U.S. Department of Education Gainful Employment Program Disclosure information, see http://catalog.asu.edu/files/shared/GE_Disclosure_TSETMCERT.pdf.

## Contact Information:

Technology and Innovation, College of
Dept of Tech Entrepreneurship and Innovation Mgmt
http://technology.asu.edu/etm
SANTN 330
technology@asu.edu
480-727-1784

## History and Philosophy of Science Certificate (LAHPSCERT)

## Campus: TEMPE

Description: The School of Life Sciences offers an undergraduate certificate in the history and philosophy of science. This program is designed to give students an understanding of both traditional philosophic issues surrounding science and the historical development of concrete scientific theories and ideas.
The philosophic questions about how we understand nature through science and how scientific claims gain authority are enriched when they are considered in an historical context. Such philosophic and historical study will also often include the examination of contemporary sciences and their place within the larger society, including the study of bioethics, policy and law.

This certificate is a valuable addition for students in the sciences or the humanities. It crosses disciplines to help students engage in unfamiliar and familiar paths of inquiry in new and interesting ways.

## Program Requirements:

- The certificate requires 18 credit hours bearing a PHI or HPS prefix, of which 12 credit hours must be upper-division.
- Within the 18 credit hours, at least nine must bear the HPS prefix.
- PHI 314 Philosophy of Science is required.
- All courses counting toward the certificate must be approved by an undergraduate advisor in the School of Life Sciences and passed with a grade of "C" (2.00) or higher.

Enrollment Requirements: Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the School of Life Sciences for more information and see http://sols.asu.edu/cbs/programs.php.

## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/
LSC 206
sols.advising@asu.edu
480-727-6277

## Honors Business Consulting Certificate (BAECNUERT) <br> Campus: TEMPE

Description: This certificate is designed to enhance your knowledge in a major while also adding to your understanding of business strategy in a global market. The required curriculum strengthens skills in:

- Business judgment.
- Conceptualization of strategic solutions.
- Critical thinking and problem solving.

Program Requirements: The program consists of 15 hours of course work. Only courses in which a student earns a grade of "C" (2.00) or higher may be used to meet the certificate requirements. Students must meet all prerequisites and course requirements as listed in the catalog. All 15 credit hours must be ASU credit.
Honors Business Core, with grade of " $B$ " or higher in each course (6)
ECN 303 Honors Managerial Economics
FIN 303 Honors Finance
MGT 303 Honors Organizational Strategies, Leadership and Behavior
MKT 303 Honors Marketing Theory and Practice
SCM 303 Honors Global Supply Operations
Business Modeling and Analysis, with grade point average of 3.00 or higher (9)
WPC 494a Consulting in Business
WPC 494b Modeling Tools in Consulting
WPC 494c Consulting Projects (capstone) - OR - WPC 493 Honors Thesis/Creative Project

Enrollment Requirements: The Certificate in Honors Business Consulting is limited to honors students in the W. P. Carey School of Business. Students must submit an application for admission during the spring semester of their sophomore year.
Please contact the department for more information.

## Contact Information:

Business, W. P. Carey School of
Department of Economics
http://wpcarey.asu.edu
BA 109
wpcareyug@asu.edu
480-965-4227

## Human Rights Certificate (LAHRTSCERT)

Campus: TEMPE
Description: The undergraduate certificate in human rights offers a model for educating and training students through socially embedded, transdisciplinary dialogue, research and practice. Course work in the social sciences, law and the humanities will prepare students to critically examine societal problems and to design culturally congruent and contextually specific solutions to human rights dilemmas in such areas as:

- Child welfare.
- Economic development.
- Education.
- The environment.
- Health.
- Indigenous rights.
- Labor rights.
- Violence against women.
- Water and energy resources.

The certificate provides students with historical, legal and philosophical perspectives from which to think broadly and critically about human rights issues, and introduces them to social science and policy research on rights, conflict and governance; to human rights conventions, laws and treaties; and to the institutions that seek to uphold these agreements (i.e., international tribunals, nongovernment organizations). Students gain background and skills needed to work within those professions most closely aligned with human rights, including some aspects of law, nongovernment organizations and other nonprofits and policy development.

Program Requirements: Students must complete 18 hours of qualifying course work, at least 12 hours of which must be from ASU. A minimum grade of "C" (2.00) is required for a course to count towards the certificate.
Required Certificate Core Courses:

- Global Politics of Human Rights (3)

Students must select one of the following courses:
POL 494 International Human Rights
JUS 352 The Global Politics of Human Rights

- Human Rights Institutions and Organizations (3)

Students must select one from the following options:

POS 465 International Organization and Law
SGS 394 International Institutions and Global Governance

- Interdisciplinary Component (9)

Sudents must select three electives on current issues in human rights. Courses must be taken from at least two of the substantive areas listed below, and from two or more academic units. Any course listed below may count towards this requirement, as well as other courses as approved by the certificate program director.

States and Conflict
HST 370 Eastern Europe in Transition
HST 436 The Soviet Experiment
JUS 374 Holocaust, Genocide and Human Rights
JUS 469 Political Deviance and the Law
JUS 479 Law and Disputing
JUS 467 Terrorism, War and Justice
JUS 494 Justice in Times of Transition
JUS 452 Justice Issues in Israel/Palestine
POS 369 War, Politics and Society
POS 465 International Organizations and Law
POS 368 Ethics and Human Rights in Global Politics
REL 388 Religion, Ethics, and International Affairs
REL 486 Holocaust in Film

Social Stratification and Human Rights
AFH 305 The Global History of the Trans-Atlantic Slave Trade
AFH 327 Human Rights in Africa
AFS 494/WGS 598 Women's International Human Rights
APA 394 Inequality and Diversity in Education
APA 394 Asian Pacific American Immigration and Social Justice
JUS 321 Wealth Distribution and Poverty
JUS 325 Globalization and Socio-Economic Justice
JUS 405 Economic Justice
JUS 415 Gender and International Development
JUS 477 Youth and Justice
PHI 309 Social and Political Philosophy
WST 394 Women and International Health

Marginalization and Human Rights
AFS 301 Race and Racism in the African Diaspora
AFS 304 Islands of Globalization
AFS 394 Race, Ethnicity and Politics in the African Diaspora
APA 330 Asian Pacific American Genders and Sexualities
APA 360 The Asian Pacific American Experience
ASB/SBS/SOC/POL 339 Introduction to Social Movements
JUS 430 Social Protest, Conflict and Change
JUS 469 Political Deviance and the Law
JUS/REL 483 Religion, Violence and Conflict Resolution
POS 480 Global Justice
SGS 343 Religion, Nationalism and Ethnic Conflict
SOC 445 Globalization, Development and Resistance
WGS 410 Poverty, Social Justice and Global Health
WGS 498 Gender, Religion and Global Violence

- Experiential Learning Component (3)

A central element of this certificate program will be the linkage of learning and doing by connecting theoretical and substantive learning about human rights with practical knowledge a

Enrollment Requirements: Students who have attained junior standing ( 56 credit hours) in any undergraduate degree program in any field at ASU are eligible for admission to the certificate in human rights. There are no formal admissions procedures to begin certificate course work, but students should contact the certificate in human rights program director or an advisor as soon as they decide to begin pursuing the certificate. They should initiate this correspondence with a message containing their name, e-mail address, major, year of study and anticipated graduation date, as well as a general statement of interest.
In addition to the undergraduate advisors in the School of Justice and Social Inquiry, students will receive advising assistance from the certificate director or a member of the certificate program committee in developing a plan that will ensure successful completion of certificate requirements. To facilitate this process, each participating unit has a representative on the program committee. Students are responsible for consulting with an advisor in the School of Justice and Social Inquiry prior to graduation to request that the certificate be recorded on their transcripts.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://justice.clas.asu.edu/
WILSN 125
justiceinfo@asu.edu
480-965-7682

## Informatics Certificate (ESCPICERT)

Campus: TEMPE

Description: The certificate in informatics will train students to use computer technology to gather, synthesize, store, visualize and interpret information. These skills are critical to a broad range of disciplines. This certificate will provide students with an understanding of the capabilities and technologies of informatics as it applies to domain specific problems in their field of study. Students completing this certificate will be able to use methods for and understand the basic computational principles behind the operation of:

- Communication, networking and interaction.
- Decision-making and problem solving.
- Modeling, inference and visualization.
- Representing, creating and running routine activities.
- Storing, indexing and retrieving information.

Graduates should be in high demand within the software industry, but also in government, education, science, medicine, and other fields that make use of computer technology. Students with the applied and user-oriented focus of thecertificate will be attractive to such employers.

Program Requirements: This program requires 21credit hours of course work. Students will take 15 credit hours of required courses and will choose six credit hours of elective course work.
Core Courses

CPI 101 Introduction to Informatics (3) (CS)
CPI 200 Mathematical Foundations of Informatics (3) (MA)
CPI 310 Information and Data Management (3)
CPI 360 Decision Making and Problem Solving (3)
STP 226 Elements of Statistics (3) *
*Please consult an advisor about alternate statistics courses.
Electives (select two)*
ART 345 3D Visualization and Rapid Prototyping (3)
BIO 355 Introduction to Computational Molecular Biology (3)
CPI 400 Scientific Computing and Visualization (3)
CPI 420 Technology and Society (3)
CPI 430 Social Simulation (3)
ENG 374 Technical Editing (3)
GPH 370 Geographic Information Technologies (3)
STS 306 Social Effects of Science and Technology (3)
*Certain departments may offer additional courses which could satisfy this elective requirement. Please consult with an advisor for approvals.

Enrollment Requirements: The undergraduate certificate in informatics is available to students in noncomputing majors who are in good standing at ASU, and may be used by B.I.S. students as part of their degree program. Students need to submit an Undergraduate Certificate form to the School of Computing, Informatics and Decision Systems Engineering Advising Center. This form is available on the registrar's website. B.I.S. studentsneed tocontact their B.I.S. advisor to add the informatics concentration to their degree program.

## Contact Information:

Engineering, Ira A. Fulton Schools of Computing and Informatics Program
http://engineering.asu.edu/cidse
BYENG 208
cidse.advising@asu.edu
480-965-3199

International Business Studies Certificate (BAIBSCERT)
Campus: TEMPE

Description: Students can expand their horizons and opportunities by learning about the global economy. The certificate is designed to:

- Develop competence in a foreign language.
- Develop sensitivity to foreign cultures.
- Provide an awareness of global social processes.
- Provide an understanding of international business environments, principles and operations.

The W. P. Carey School of Business has partnerships with universities in Europe, Asia and Latin America so you can experience new cultures, visit new places and build intercultural and language skills. International internships also are offered in conjunction with the ASU Study Abroad Office.

Program Requirements: This certificate program requires a minimum of 18 credit hours, which are outlined below. All business course work must be completed through the W. P. Carey School of Business or through an approved ASU international study program. Only courses in which a student receives a grade of \&Idquo;C\” (2.00) or higher may be used to meet the certificate requirements, and an overall certificate GPA of at least 2.50 must be earned. Students must meet all course prerequisites and requirements as listed in the ASU catalog.Certificate requirements must be completed within one year of graduation date. The four required areas of completion for the certificate are:

- International business course work (9).
- Non-business global awareness course work (9).
- Language proficiency.
- International study experience.
A. International Business Course Work (9)

A total of three international business courses are to be taken. Students must choose one foundation course and two electives. Foundation course (3): MGT 302 Principles of International Business or ECN 306 Survey of International Economics or AGB 302 International Management and Agribusiness
Elective courses (6).
B. Non-Business Global Awareness Course work (9)

These hours may be satisfied by any combination of the following:

- Recommended: It is recommended to choose courses related to your area of study abroad experience.Additional courses may be approved by the International Program Coordinator.
- Any university designated non-business Global Awareness (\&Idquo;G\”) courses.
- Non-business global awareness hours may also be satisfied by:
- An ASU or W. P. Carey School of Business education abroad program for one semester fulfills all nine hours of non-business global requirements.
- An ASU or W. P. Carey School of Business program earning six credit hours fulfills six of the hours of non-business global requirements.
- An ASU or W. P. Carey School of Business program earning three credit hours fulfills three of the hours of non-business global requirements.


## C. Foreign Language Proficiency

The certificate program requires the equivalent of one year of college-level study of a foreign language. Foreign language proficiency is met in one of the following ways:

- Completion of one year (two semesters) of the same foreign language at the college level.
- Completion of one semester of the equivalent of 101 and 102 level course work.
- Completion of two years of the same foreign language in high school with a minimum grade of \“C\” (2.00).
- Documentation of a proficiency test confirming you are prepared to start at least the second year of a foreign language (201 level or above).
- A student whose first language is not English may have this requirement waived.
D. International Study Experience

Participation in an ASU-approved international study program is required.

Enrollment Requirements: Students need to complete an application, which is available online or in BA 109. Please contact the department for more information and see http://wpcarey.asu.edu/international.

## Contact Information:

Business, W. P. Carey School of
Dean, W.P. Carey School of Business
http://wpcarey.asu.edu/
BA 109
wpcareyug@asu.edu
480-965-4227

## International Studies Certificate (LAINSCERT)

Campus: TEMPE

Description: The international studies certificate is designed to prepare students for careers in government agencies, international governmental and nongovernmental organizations, multinational firms and banks and for graduate studies in international relations or political science. The certificate is not a substitute for degree requirements in any subject, including political science; rather, the required courses add an international and comparative dimension to the student's chosen major.

Program Requirements: Requirements for the certificate are intended to provide an understanding of international relations and comparative government, an awareness of global, social and political-economic processes and sensitivity to foreign political systems and cultures. These objectives are met by a sequence of political science courses in the areas of international relations, comparative politics and area studies. Students majoring in any subject at the university may be awarded the international studies certificate upon completion of the following 15 credit hours of political science courses.
Choose one from the courses below:

POS 150 Comparative Government, SB, G (3)
POS 160 Global Politics, SB, G (3)

Choose one from the courses below:

POS 361 American Foreign Policy SB, G (3)
POS 364 National Security, Intelligence and Terrorism SB (3)

Choose two from the courses below:

POS 300 Contemporary Controversies in Global Politics, SB, G (3)
POS 368 Ethics and Human Rights
POS 465 International Organization and Law, SB, G (3)
POS 467 International Security, SB, G (3)
POS 486 International Political Economy, SB, G (3)

Choose one from the courses below:

POS 350 Comparative Politics, SB, G (3)
POS 355 Russia and Successor States, SB, G (3)
POS 356 European Union, SB, G (3)
POS 357 South Asia Politics, SB, G (3)
POS 358 Southeast Asia, SB, G (3)
POS 359 African Politics and Society, SB, G (3)
POS 360 World Politics, SB, G (3)
POS 451 China, Japan and the Koreas, SB, G (3)
POS 452 China, SB, G (3)
POS 453 South America, SB, G (3)
POS 454 Mexico, SB, G (3)
POS 455 Central America and the Caribbean, SB, G (3)
POS 459 South and Southern Africa, SB, G (3)
POS 463 Inter-American Relations, SB, G (3)

Certificate students must have a minimum GPA of " $C$ " (2.00); only courses in which students have a grade of " $C$ " (2.00) or higher count toward the certificate.

Enrollment Requirements: Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the School of Government, Politics and Global Studies for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of Politics and Global Studies
http://spgs.clas.asu.edu
COOR 6797
480-965-6551

## Islamic Studies Certificate (LAISLCERT)

Campus: TEMPE
Description: Any student admitted tostudy at ASU iseligible for the Islamic studies certificate program. Students who complete all the requirements of their undergraduate major, their college and the certificate program receive the certificate plus transcript recognition of their particular emphasis. The certificate program is designed to prepare students for graduate programs in religious studies, Islamic studies and area studies or for any academic discipline (such as professional programs in international law and business) that focuses on global Muslim society.

Program Requirements: Students must complete a minimum total of 26 credit hours, chosen in consultation with the Islamic studies program coordinator. A minimum grade of " $C$ " (2.00) is required in each course. A minimum of 12 upper division hours are required. To earn the certificate, students must complete these requirements:

- Eight credit hours of Arabic, Indonesian or another language approved by the program coordinator; students who are native speakers of these languages or who otherwise have equivalent knowledge substitute two additional courses approved by the program coordinator.
- Nine credit hours from REL 260 Introduction to Islam, REL 365 Islamic Civilization and REL 366 Islam in the Modern World.
- Three upper divisionREL elective credit hours in courses that deal with Islam and/or Islamic studies (must be approved by the program coordinator).
- Six elective credit hoursin courses from a variety of disciplines that deal with Islam and/or Islamic studies (must be approved by the program coordinator).

Enrollment Requirements: Any student admitted to study at ASU may complete a certificate.

## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://shprs.clas.asu.edu/islamic
COOR 3rd floor Advising Center
SHPRSadvising@asu.edu
480-965-8364

## Jewish Studies Certificate (LAJUDCERT)

## Campus: TEMPE

Description: The Jewish studies program is designed with the following goals in mind:

- To examine the history and culture of the Jews.
- To generate and facilitate research on Judaica.
- To provide the community with programs, courses, and research furthering the understanding of Judaica.
- To provide a model for interdisciplinary teaching and research.
- To stand as an example of the university's commitment to a program of meaningful ethnic studies on a firm academic base.

Program Requirements: To complete the certificate in Jewish studies, a student must successfully complete seven approved courses (a minimum of 12 upper-division credit hours)in Jewish studies with a grade no lower than a " C " (2.00) in any course. Students should declare themselves as Jewish studies certificate candidates as early as possible in their program of study, and accomplish the following prior to graduation:

- Formal declaration of intent through the submission of the Certificate in Jewish Studies Application.
- Completion of at least seven courses in Jewish Studies, including two semesters of Hebrew language or equivalent approved courses.
- One course in three of the following five areas:
- History.
- Humanities.
- Literature.
- Religious studies.
- Social studies.
- Two courses of the student's choice in any Jewish studies related subject.

Petition for receipt of the certificate by notifying religious studies advising upon completion of courses.

Enrollment Requirements: Please contact the School of Historical, Philosophical and Religious Studies Advising Center for more information.

## Contact Information:

Liberal Arts and Sciences, College of
Dean, College of Liberal Arts and Sciences
http://jewishstudies.clas.asu.edu/certificate
COOR 3rd floor Advising Center
SHPRSadvising@asu.edu
480-727-6906

## Knowledge Entrepreneurship and Innovation Certificate (BAKEICERT)

## Campus: TEMPE

Description: The certificate program is comprised of three, university-wide core courses followed by two courses within a student's disciplinary college. Individual colleges will be encouraged to offer a capstone course as part of the program. Beyond topics related specifically to entrepreneurial business practices, courses include such topics as social entrepreneurship, arts entrepreneurship, idea generation and storytelling as additional perspectives for the student entrepreneur.
Students completing the certificate in knowledge entrepreneurship and innovation are recognized for their achievements on their transcript. Career services markets the certificate to potential employers, highlighting the innovative skills that students with this designation can offer.

Program Requirements: Required Core (9)

- CORE 1: MGT 294 My Life Venture OR TEM 294 My Life Venture
- CORE 2: MGT 394 Creativity and Innovation OR TEM 394 Innovation and Creativity Methods (3)
- CORE 3: MGT 360 Entrepreneurship and Value Creation OR TEM 394 Technological Entrepreneurship

Capstone Experience (at least 6 credit hours)

- It is the responsibility of the student to check the prerequisites required by courses in their discipline.
- Capstone courses will be designated and approved by individual disciplinary colleges.
- Capstone courses will consist of existing courses or new courses created by departments.

Prerequisite Information

- MGT 394 Creativity and Innovation has a prerequisite requirement of WPC/MGT 294 My Life Venture with a "B" (3.00) or above OR current W. P. Carey School of Business B.A. or B.S. student status.
- MGT 360 Entrepreneurship and Value Creation has a prerequisite requirement of: WPC/MGT 294 My Life Venture with a grade of "B" (3.00) or above and WPC/MGT 394 Creativity and Innovation with a grade of "B" (3.00) or above OR ACC 240 or ACC 241 with a grade of "C" (2.00) or above.


## Contact Information:

Business, W. P. Carey School of
Department of Management
http://wpcarey.asu.edu/
BA 352L
wpcadmissions@asu.edu
480-965-1184

## Korean Studies Certificate (LAKORCERT)

Campus: TEMPE
Description: The certificate in Korean studies aims to train and produce students who are linguistically able and culturally informed. The program consists of two major components. The first is to build students' language proficiency in Korean in the areas of speaking, listening, reading and writing. The second is to offer students a broad range of knowledge of the culture, literature, history, art and religions of Korea. The certificate allows students to focus on Korean studies, which cannot be attained through the existing degree or non-degree programs in East Asian studies at ASU. The program will enrich students' perspectives on different cultures and socities at the intellectual level and also equip students with practical knowledge of Korea that will benefit careers in various professions, including academe, government work, international trade, NGOs, and translations.

Program Requirements: Language RequirementStudents must demonstrate proficiency in the Korean language at the intermediate level. The language requirement can be satisfied by completing the 201-202 sequence, one year of study abroad at the intermediate level, or achieving a satisfactory score on a proficiency exam. Language proficiency evaluations will be conducted by Dr. Chan Young Park (cypark@asu.edu).Core Courses ( 12 credit hours)Students must complete at least 12 credit hours at or above the 300 level of core courses from the following:KOR 313 Third-Year Korean IKOR 314 Third-Year Korean IIKOR 347 Korean Film and LiteratureKOR 350 Women of KoreaREL 354 Religious Tradition of Korea
Elective Courses ( 6 credit hours)In addition to the above core courses, students are required to complete 6 credit hours from an approved list of electives. These courses must be from two different departments. The following is a model of a list of electives:REL 394 Korean BuddhismHST 303 Studies in Asian HistoryHST 388 JapanREL 345 Asian Religious TraditionsHST 451-452 Chinese Cultural historyCHI 494 Print Culture and Book in East AsiaAdditional courses may be approved by the coordinator of the certificate program. These credit hours will be chosen in consultation with the certificate coordinator. The completion of the requirements will be reviewed both by the students' designated advisors and the coordinator of the program. A minimum grade of " C " or better is required in each course. In the end, the coordinator will sign off on the certificates.

Enrollment Requirements: ASU students admitted to a degree program in any field of study would be eligible for the Korean studies certificate program. Other than the course work and examinations required in the major field of interest, students would be responsible for fulfilling the minimum requirements of 18 credit hours (at least 12 credit hours for core courses) in addition to the basic language requirement to earn the Korean studies certificate.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/
LL 402B
silc@asu.edu
480-965-0420

## Latin American Studies Certificate (LALASCERT)

Campus: TEMPE
Description: The Latin American studies certificate program is designed to give students an understanding of culture, economies, political structures and the history of Latin American nations. The departments of economics, geographical sciences, history and
political science, the School of Human Evolution and Social Change, the School of International Letters and Cultures (Spanish and Portuguese) and the School of Transborder Studies offer courses that combine in the interdisciplinary certificate.

## Program Requirements:

- Students must complete 30 credit hours of upper-division courses with a "C" (2.00) or better from the above departments/colleges with a concentration in Latin America, 15 credit hours in the major subject and 15 credit hours in other disciplines.
- The certificate requires Spanish or Portuguese proficiency through the 313 level of conversation and composition.
- Only language courses above 313 in literature and civilization count toward a major or interdisciplinary areas of preparation.
- Spanish and Portuguese courses above 313 in grammar and phonology do not count toward the major requirements. Students should meet with the certificate advisor regarding course questions.

Enrollment Requirements: Any student admitted to study at ASU may complete a certificate. For more information, contact the School of International Letters and Cultures and see the school's webpage for more information.

## Contact Information:

Liberal Arts and Sciences, College of
Dean, College of Liberal Arts and Sciences
http://silc.asu.edu/undergraduate/certificates
LL 440
silc@asu.edu
480-965-6281

## Leadership and Ethics Certificate (PPLDECERT)

## Campus: DTPHX

Description: The certificate in leadership and ethics is designed for undergraduate students who are interested in developing leadership skills or wish to enhance their degree in an existing major at ASU, working adults who may wish to further their education yet may not be looking for a degree program, or B.I.S. students who seek to combine certificates with their degree.
The certificate program provides a catalyst for students to become ethical leaders of organizational and community change. This certificate is designed to:

- Explore the relationship between leadership and the capacity for individuals to assume responsibility for their actions and to act with a sense of ethics and integrity.
- Focus on understanding the broad interdisciplinary field of leadership and its application to various elements of society and community.
- Prepare individuals for positions of leadership and responsibility in the university, student organizations, in their communities and throughout their careers in business, government and society.

Program Requirements: The certificate in leadership and ethics consists of 15 credit hours of course work. Students take 12 hours of core classes and three hours of elective courses. The three hours of elective course work may be selected from an approved list of elective classes or upon the recommendation of the department.
All courses applied to the certificate must be completed with a grade of "C" ( 2.00 on a 4.00 scale) or better. The certificate in leadership and ethics requires four core courses, including a leadership capstone experience, and one elective, discipline-based course in leadership or ethics.
Core classes
PAF 410 Building Leadership Skills (3)
PAF 411 Leadership and Change (3)
PHI 394 Ethics and Justice (3) or PAF 460 Public Service Ethics (3)
PAF 494 Leadership Capstone (3)
All core courses and the leadership capstone must be taken at Arizona State University. Any course substitutions for the certificate are at the discretion of the School of Public Affairs.

Enrollment Requirements: There are different application requirements, depending on your enrollment status with ASU. Students are also encouraged to schedule an appointment with the undergraduate academic adviser in the School of Public Affairs. Undergraduate Students Currently Enrolled at ASU
Current students interested in earning the certificate must complete a request to add an undergraduate certificate and return it to the undergraduate academic advisor in the School of Public Affairs at the University Center on the Downtown Phoenix campus.

Students may begin taking courses before they formally register for the certificate; however, they are encouraged to complete the paperwork as soon as possible.
Download the request to add an undergraduate certificate at http://students.asu.edu/node/1993.
Individuals Not Currently Enrolled at ASU
Individuals who are not currently enrolled as students at Arizona State University must complete an application to enroll as a nondegree seeking student before they may begin taking courses. For information on admissions and to complete an application, visit the university's nondegree student admissions page at http://students.asu.edu/non-degree-student-admission. Once students have been admitted, they are eligible to enroll in courses to complete the certificate program.

## Contact Information:

Public Programs, College of
School of Public Affairs
http://spa.asu.edu/new/undergrad/leadership\&ethics.htm
UCENT 400
spa@asu.edu
602-496-0450

## Lesbian, Gay, Bisexual, and Transgender Studies Certificate (PPLGBTCERT)

## Campus: DTPHX

Description: The undergraduate certificate in lesbian, gay, bisexual and transgender studies is offered by the Committee on Lesbian, Gay, Bisexual, and Transgender Studies, administered through the College of Public Programs. Advising is provided through University College. Lesbians, gay men, bisexuals and transgendered (LGBT) people play important roles as colleagues, clients, parents, children, siblings, neighbors, employees, employers, religious leaders and friends. Given the increasing visibility and changing political climate for LGBT people in the United States, all students, not only those who identify themselves as gay, lesbian, bisexual or transgender, are served well by learning about the histories, communities and contemporary social issues regarding people from LGBT backgrounds.
The educational experience is enhanced when students are introduced to complex intersections between and among sexual, racial, ethnic, religious, geographic and national identities. The philosophy of this certificate program is to promote intellectual and pedagogical diversity as one of the university's greatest assets, in part by instilling in students sensitivity to cultures different from their own, but also through careful analysis of the self in historical, artistic and sociocultural contexts. The goals of the certificate program are to give students:

- Knowledge about specific lesbian, gay, bisexual and transgendered communities.
- Knowledge about the history and maintenance of the category, lesbians and gay men.
- Practical experience in utilizing course work knowledge in the community through an internship or community service project.
- Theoretical perspectives on heterosexuality as a presumptive sexual identity.
- An understanding of lesbian, gay, bisexual and transgender studies as an academic area of inquiry.
- An understanding of community politics, dynamics and conflicts.
- Use-inspired education that culminates in a public presentation.

Program Requirements: The certificate requires 15 credit hours; a minimum of 12 must be upper division. The two required courses are 1) Introduction to Lesbian, Gay, Bisexual, and Transgender Studies, and 2) the capstone experience. The remaining nine hours are electives from an approved list.

Enrollment Requirements: Please contact University College or visit the college's website for more information.

## Contact Information:

Public Programs, College of
College of Public Programs
http://uc.asu.edu/LGBT
UCENT 300
480-965-4464

## Medieval Studies Certificate (LAMRSCERT)

Campus: TEMPE

Description: An undergraduate certificate in medieval and Renaissance studies is offered by the Arizona Center for Medieval and Renaissance Studies (ACMRS). In order to reflect the interdisciplinary nature of the field, the ACMRS has established a certificate program for undergraduate students in medieval and Renaissance studies.
The program provides students the opportunity to take classes from several disciplines, and to receive training in both Latin, the international language of the periods, and paleography, the study of the physical medium through which Latin and other languages were transmitted. Obtaining the certificate prepares undergraduate students for advanced study, and it augments the skills and knowledge necessary for graduates to succeed in academic positions in their field.

Program Requirements: In addition to the course work and examinations required in a student's major field of interest, the following minimum requirements must be fulfilled to earn the certificate, 1) six credit hours of classical Latin and six credit hours of Latin (classical and/or medieval) or of a vernacular language of the period (e.g., Old English, Old Norse, Old French, Renaissance Italian), and 2) six credit hours of course work in medieval and Renaissance studies outside the major discipline. Students must also complete a thesis, writing within the major on a topic concerning the Middle Ages or Renaissance. Students may earn three credit hours of independent study for the thesis. The thesis may be used to fulfill the Honors College thesis requirement for students enrolled in Barrett, the Honors College. A minimum of a " $C$ " $(2.00)$ average is required in all course work leading to the certificate.

Enrollment Requirements: Any student admitted to study at ASU may complete a certificate.Please contact ACMRS for more information: http://acmrs.org/academic-programs/certificate.

## Contact Information:

Liberal Arts and Sciences, College of
Dean, College of Liberal Arts and Sciences
http://acmrs.org/academic-programs/certificate
COOR 4432
acmrs@asu.edu
480-965-8097

## Nonprofit Youth/Human Service Leadership/Management awarded thru American Humanics Inc Certificate (PPNPYCERT)

## Campus: DTPHX

Description: The certificate program in nonprofit leadership and management American humanics provides education and preparation for leadership and management positions in nonprofit youth and human service organizations. The program features professional affiliation with and certification by American Humanics, Inc., the nation's leader in education for nonprofit careers. American Humanics collaborates with a number of nonprofit organizations, including:

- American Red Cross.
- America's Second Harvest.
- AmeriCorps.
- The ARC.
- Big Brother Big Sisters.
- Boys and Girls Clubs.
- Boy Scouts of America.
- Camp Adventure.
- Camp Fire U.S.A.
- Corporation for National and Community Service.
- Girls Inc.
- Girl Scouts of the U.S.A.
- GuideStar.
- The Humane Society of the United States.
- Junior Achievement.
- March of Dimes.
- National 4-H Council.
- National Urban League.
- Opportunity Knocks.org.
- Points of Light Foundation.
- United Way of America.
- Volunteers of America.
- Y.M.C.A. of the U.S.A.

Program Requirements: The program includes active participation by nonprofit professionals who offer workshops, seminars, mentoring and field trips. American Humanics national certification can be earned in conjunction with any bachelor's degree. Requiredcourses (30)

NLM 220 Introduction to Nonprofit Organizations (3)
NLM 300 Fund Raising and Resource Development (3)
NLM 310 Volunteer Management (3)
NLM 320 Professional Development Seminar (4)( one credit each over four semesters)
NLM 420 American Humanics Institute (2)
NLM 430 Managing Nonprofit Organizations (3)
NLM 463 Senior internship (12)
Enrollment Requirements: Applications forthe American Humanics certificate areavailable through the School of Community Resources and Development academic advisors andthe American Humanics program coordinator.

- A minimum "C" (2.00) grade required for all classes in the certificate.
- A minimum GPA of 2.00 for those pursuing the certificate.
- Must be a junior to take 400-level courses.
- Thirty hours of graded course work.


## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://scrd.asu.edu
UCENT 550
scrd@asu.edu
602-496-0550

## Oral History Certificate (ASOHCCERT)

Campus: WEST
Description: The oral history certificate in New College introduces students to the interdisciplinary theories and methods of oral history that enable scholars, students and practitioners to collect, document and preserve the stories and memories of people's lives. The certificate will train students to acquire critical knowledge and applied skills, and to abide by the professional standards involved in oral history documentation, research and presentation. Students in the program may build on existing projects or develop new community relationships at local, national and international levels. Consistent with ASU's mission and New College goals, the certificate fosters and understanding and appreciation of diverse cultures, past and present, and engages students in socially embedded and ethical practices in oral history research and interviewing.

Program Requirements: Students must meet with the program academic advisor to review the requirements and sign the certificate check sheet. The student should also consult with and academic advisor in the college or department of his or her major to make sure the college or department recognizes the certificate. All course work in the program must be completed with a grade of "B" (3.00) or higher. A total of 18 credit hours is required.

Residency Requirement
Of the 18 upper-division credit hours required for the certificate, 12 credit hours must be completed at ASU.
Core Requirements (6)
ETH 310 Critical Research Methods (3)
AMS 498 Pro-Seminar (3)
Additional Requirements (12)
The course bank includes upper-division courses offered across the university. Students may choose from the following prefixes upon approval by appropriate faculty or advisor:

- American Studies (AMS).
- English (ENG).
- Ethnicity, Race and First Nation Studies (ETH).
- History (HST).
- Interdisciplinary Arts and Performance (IAP).
- Integrative Studies (IAS).
- Philosophy (PHI).
- Religion (REL).
- Sociology (SOC).
- Spanish (SPA).
- Women and Gender Studies (WST).

Recommended courses
COM 346 Oral History and Storytelling (3)
ENG 317 Cross-Cultural Writing (3)ENG 376 Writing a Personal History (3)ENG 377 Editing Family History for Public Audiences (3)ENG 394 ScriptwritingENG 412 Creative Nonfiction (3)ENG 476 Studies in Folklore (3)IAP 331 Performance, Acting, and the Individual (3)IAP 364 DocumentariesSOC 389 Ethnographic Field Lab (3)WST 370 Chronicling Women's Lives (3)WST 473 Latina/Chicana Representations

Enrollment Requirements: The certificate in oral history is open to any student admitted to study at Arizona State University. The certificate program is also available for graduate students, non-degree students and students majoring in professional programs. Contact advisors in the Division of Humanities, Arts and Cultural Studies for admission to the certificate program.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/certificates/oralhistory
FAB N201
harcs.dept@asu.edu
602-543-4444

## Philosophy, Politics, and Law Certificate (HOPPLCERT)

## Campus: TEMPE

Description: Students enrolled in Barrett, the Honors College may pursue the certificate in philosophy, politics and law. This interdisciplinary program affords an opportunity to engage in a focused program of study that brings analytical rigor to bear on the philosophical issues involved in law and politics.

Program Requirements: The concentration comprises six courses (18 credit hours), two of which are offered through Barrett. One of these courses, normally taken in the student's second year at ASU, is a seminar on law, justice and morality (HON 310). The second course is a junior-senior seminar on theories of justice, or a related topic in philosophy, politics and law, that entails an extended paper (HON 410). The remaining four courses must be approved by the philosophy, politics and law council and selected from courses regularly offered in philosophy, political science and other areas.

Enrollment Requirements: Students must be in good standing with Barrett, the Honors College or be admitted upon nomination by a member of the philosophy, politics and law faculty and approval by the philosophy, politics and law council. Please contact Barrett for more information.

## Contact Information:

Honors - Barrett, The Honors College
The Barrett Honors College
http://barretthonors.asu.edu/home/2008/12/philosophy-politics-and-law-certificate/
SGHAL110
480-965-4033

## Philosophy, Rhetoric and Literature Certificate (ASPRLCERT)

Campus: WEST

Description: The certificate in philosophy, rhetoric and literature within the New College of Interdisciplinary Arts and Sciences is an interdisciplinary program that works across the humanities by examining philosophical approaches to literary studies, disputes between rhetoric and philosophy, and rhetorical elements of literature and theory. The philosophy, rhetoric and literature certificate
will enable students to explore where and how the boundaries among philosophy, rhetoric and literature are constructed, maintained and changed. This certificate is transdisciplinary and aimed at integrating Continental philosophy (including philosophy of religion), critical theory (both in its broader origins within literary cultural studies and its historically specific genealogy from the Frankfurt School), rhetoric, literary criticism, aesthetics and communication. This certificate will prepare students in the humanities, social and behavioral sciences and the arts for lifelong learning, advanced study in a variety of fields, and successful careers in an increasingly diverse society.

Program Requirements: The certificate in philosophy, rhetoric and literature is open to any student admitted to study at Arizona State University. A certificate in philosophy, rhetoric and literature is awarded for successful completion of 18 upper-division credit hours of course work:

- One course in rhetoric (3).
- One course in Continental philosophy (see core requirements) (3).
- Twelve elective credit hours from the approved course list in Philosophy, Rhetoric and Literature ( 6 credit hours from pool A and 6 credit hours from pool B).

All elective course offerings from the course bank will be regularly updated and overseen by the facilitators of the certificate program. Students must meet with the program academic advisor to review the requirements and sign the certificate check sheet. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major recognizes the certificate. All course work in the program must be completed with a grade of $B(3.00)$ or higher.
Of the 18 upper division credit hours required for the certificate, 12 credit hours must be completed at ASU.
I. Core Requirements ( 6 credit hours)

Rhetorical Perspectives ( 3 credit hours from the approved course list in philosophy, rhetoric and literature)
ENG 472 Rhetorical Studies
COM 321 Rhetorical Theory and Research
ENG 494 Rhetoric, Literature and Poetics
ENG 394/494 Special Topics*

Philosophical Perspectives (3 credit hours from the approved course list in philosophy, rhetoric and literature)
PHI 394/REL 394 Studies in Contemporary Continental Philosophy
PHI 494/REL 494 Studies in Critical Theory
PHI 494/REL 494 Philosophy and Literature PHI 494/REL 494 Continental Philosophy and Religion
II. Electives ( 12 credit hours, 6 credit hours each from pools $A$ and $B$ )

Electives come from the course bank of approved courses for Philosophy, Rhetoric and Literature.
Pool A ( 6 credit hours)
ENG 400 History of Literary Criticism
ENG 401 Topics in Critical Theory
ENG 421 Studies in Shakespeare
ENG 431 Whitman and Dickinson
ENG 440 Studies in American Literature and Culture
ENG 450 The British Novel
ENG 454 Gender and Literature
ENG 461 Studies in Women and Literature
ENG 472 Rhetorical Studies
ENG 478 Modernist Literature
ENG 479 International Postmodern Literature
ENG 494 Rhetoric, Literature and Poetics
ENG 494 Special Topics: The Postcolonial Novel
ENG 394/494 Special Topics*
HON 394/494 Special Topics*
IAP 310/IAS 310 Women in Art
IAP 371Verbal Art
IAP 372 The Critical Artist
IAP 472 Theories of Arts and Performance
IAP 471 Language, Culture, and Performance
IAP 473 Aesthetic Research

Pool B (6 credit hours)
COM 321 Rhetorical Theory and Research
COM 324 Rhetoric and Media Criticism
COM 421 Rhetoric of Social Issues
COM 429 Semiotics and Visual Communications
COM 394/494 Special Topics (taught by current faculty in PRL or from the approved course topics in Philosophy, Rhetoric and Literature )
REL 300 Thinking, Writing \& Research in Religion and Applied Ethics
REL 301Comparative Mysticism
PHI 304Existentialism
REL 305Ritual, Symbol, and Myth
PHI 308Philosophy of Art
REL 314 Jewish Philosophy
REL 345 Asian Religious Traditions
REL/WST 390 Women and Religion
PHI 324/IAS 324 Existential Ethics
PHI 391Historical Perspectives on Philosophy and Religion
REL 405Problems in Religious Studies
PHI 394/REL 394Love in Philosophy
Enrollment Requirements: The certificate in philosophy, rhetoric and literature is open to all undergraduate majors.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/certificates/prl
FAB N230K and FAB N237
newcollegePRL@asu.edu
602-543-6049

## Public Administration and Public Management Certificate (PPPAFCERT)

Campus: DTPHX
Description: The certificate in public administration and public management prepares students for citizenship, leadership and careers in governmental and non-profit agencies. Students will learn the context and principles of public administration and how to apply these in a practitioner setting; the role of the public administrator in the design, implementation and evaluation of public policy; and how to lead change and address ethical issues in public service. It is designed for undergraduate students who are interested in developing leadership skills or wish to enhance their degree in an existing major at ASU, working adults who may wish to further their education yet may not be looking for a degree program, or B.I.S. students who seek to combine certificates with their degree.
The program is designed for students interested in public service who want to learn skills to:

- Analyze critical issues.
- Build and bridge communities.
- Deliver and manage public programs.
- Improve the quality of life.
- Lead change in public policy.
- Provide public safety.
- Preserve natural resources.
- Reform welfare.
- Strengthen democratic governance.

Program Requirements: The certificate in public administration and public management consists of 15 credit hours of course work. Students take 12 hours of core classes and three hours of elective courses. The three hours of elective course work may be selected from an approved list of elective classes, taken upon the recommendation of the department.
Core Courses
PAF 300 Public Management and Public Administration
PAF 340 Public Management and Policy

Enrollment Requirements: There are different application requirements, depending on your enrollment status with ASU. Students are also encouraged to schedule an appointment with the undergraduate academic adviser in the School of Public Affairs. Undergraduate Students Currently Enrolled at ASU
Current students interested in earning the certificate must complete a request to add an undergraduate certificate and return it to the undergraduate academic advisor in the School of Public Affairs at the University Center on the Downtown Phoenix campus. Students may begin taking courses before they formally register for the certificate; however, they are encouraged to complete the paperwork as soon as possible. Download application from http://students.asu.edu/node/1993.
Individuals Not Currently Enrolled at ASU
Individuals who are not currently enrolled as students at Arizona State University must complete an application to enroll as a nondegree seeking student before they may begin taking courses. For information on admissions and to complete an application, visit the university's nondegree student admissions page at http://students.asu.edu/non-degree-student-admission. Once students have been admitted, they are eligible to enroll in courses to complete the certificate program.

## Contact Information:

Public Programs, College of
School of Public Affairs
http://spa.asu.edu/new/undergrad/pa_mgt.htm
UCENT 400
spa@asu.edu
602-496-0450

## Religion and Conflict Certificate (LARELCERT)

## Campus: TEMPE

Description: The certificate may be of particular interest for students pursuing careers in journalism, law, policy work, diplomacy, the military, public advocacy, publishing, education, ministry or other fields in which an enhanced understanding of religion and conflict is increasingly vital.

Program Requirements: Students must complete 18 credit hours of qualifying course work (at least 12 hours from ASU and a minimum of 12 upper-division credit hours), consisting of regional, political and cultural components. To ensure that students are exposed to a wide variety of approaches to the study of religion and conflict, an interdisciplinary component requires that at least six of the 18 hours be fulfilled with courses from the humanities and at least three hours from the social sciences. In many cases, the same course can be used to fulfill several component requirements simultaneously.

- Regional component (6): courses in this category provide students specific regional knowledge of how religion has been implicated in human conflict. Required course work in at least two different regions fosters a comparative understanding of the dynamics of religion and conflict in historical and global contexts.
- Political component (3): courses in this category explore how religion influences, or is influenced by, matters of state, law, government or other dimensions of political life.
- Cultural component (3): courses in this category provide students with an understanding of how religion operates as a powerful force that impacts and intersects with expressions of human identity, thought and culture.
- Electives (6): any approved/qualifying course (either from the above categories or other approved classes) may be used as an elective to fulfill remaining requirements toward the total number of credit hours and to meet the interdisciplinary requirement.
- Of the total 18 credits taken to fulfill the certificate, at least three credits must be from the social sciences (SOC, POS, SGS, or WST) and six credits from the humanities (ARB, HST, POR, or REL).


## Religion and Conflict Course Offerings

A minimum grade of " $C$ " (2.00) is required for a course to fulfill a certificate requirement. For a current list of approved courses, see www.csrc.asu.edu.

Enrollment Requirements: Any ASU student may pursue the religion and conflict certificate. To enroll or for questions about the program, contact Professor John Carlson, thecertificate director.

## Contact Information:

Liberal Arts and Sciences, College of

Historical, Philosophical \& Religious Studies, Sch
http://www.csrc.asu.edu/education/undergraduate_certificate.html/
WHALL 130
csrc@asu.edu
480-965-7187

## Russian and East European Studies Certificate (LAREECERT)

Campus: TEMPE
Description: The certificate in Russian and East European studies encourages students to develop special competency in Russian or East European languages and area studies. Course work leading to the certificate is offered in agribusiness, architecture, biology, economics, Eurasian languages (Armenian, Tajik, Tatar, and Uzbek), geography, history, international business, music, political science, religious studies, Slavic and East European languages (Albanian, Bosnian/Croatian/Serbian, Macedonian, Polish, Romanian, and Russian), sociology and women's studies, but the certificate program is open to all students, regardless of major.
Certificate holders enhance their prospects for study abroad fellowships and graduate admissions, and also qualify for unique entrylevel government employment opportunities. Past certificate awardees have moved into positions of leadership in government, academia, and the private sector.

Program Requirements: The requirements for the Russian and East European studies certificate comprise 1) three years (22 credit hours) of Russian or another Eurasian or East European language, and 2) thirty credit hours (at least 24 upper-division credit hours)in Russian, East European and Eurasian area-related course work.
At least three disciplines must be represented in the area-related course work, and at least 12 credit hours must be outside the School of International Letters and Cultures (i.e., non-RUS, SLC, and SLV courses). Fulfillment of these requirements is certified by the Melikian Center for Russian, Eurasianand East European Studies and is recognized on the transcript as a certificate in Russian and East European studies. The purpose of this undergraduate certificate program is to encourage students majoring in a chosen discipline to develop special competency in Russian, Eurasian, or East European languages and area studies. A student with a major in any school or department may pursue this certificate.

Enrollment Requirements: Any student admitted to study at ASU may pursue a certificate program. In order to apply to study at ASU, complete the Office of Admission online application. Please contact the Melikian Center for more information.

## Contact Information:

Liberal Arts and Sciences, College of
Dean, College of Liberal Arts and Sciences
http://melikian.asu.edu/
COOR 4448
melikiancenter@asu.edu
480-965-4188

## Small Business and Entrepreneurship Certificate (BASMBCERT) Campus: TEMPE

Description: Students learn how to launch their own business or work with small or startup operations. Courses include small business, entrepreneurship and business plan development. Classroom work is complemented by frequent interaction with successful founders and leaders of entrepreneurial ventures.

Program Requirements: This certificate in small business and entrepreneurship is available only to business majors at ASU. The certificate requires 15 credit hours of classes, including the following six credit hours:
MGT 440 Entrepreneurship (3)
MGT 445 Business Plan Development (3)
The remaining nine credit hours consist of three additional upper-division courses relevant to small business. A copy of the approved electives for business majors pursuing the certificate in small business and entrepreneurship is available in the undergraduate programs office, BA 109. To receive the certificate, students must complete the specified business courses with a grade of "C" ( 2.00 on a scale of 4.00) or higher.

Enrollment Requirements: Students need to complete an application, which is available online or in BA 109. Please contact the department for more information and also see http://wpcarey.asu.edu/undergraduate/current-students/academics/small-businesscertificate.cfm (then click on the embedded link "course requirements for the Small Business and Entrepreneurship Certificate").

## Contact Information:

Business, W. P. Carey School of
Dean, W.P. Carey School of Business
https://wpcarey.asu.edu
BA 109
wpcareyug@asu.edu
480-965-4227

## Socio-Legal Studies Certificate (LASLSTCERT)

Campus: TEMPE

Description: The undergraduate certificate in socio-legal studies offers a model for educating and training students in the study of legal ideas, institutions and practices from the perspectives of the social sciences, law, and the humanities. The distinction between law "on the books" and law "in action," which refers to how people experience law in their everyday lives, is a cornerstone of the certificate program. Course work provides students with multiple and intersecting theoretical and methodological approaches that reveal law as a socially embedded system of loosely connected institutions, practices, presumptions and rules. Students participating in the certificate program will learn how to apply these socio-legal tools of analysis to their study of law in action.

Program Requirements: The certificate consists of four components to ensure students develop a broad understanding of sociolegal studies. Foundational courses in socio-legal theories (three credits) and in legal institutions (three credits) will be required. Students will then have the option of selecting three electives (nine credits) from a set of approved courses, providing flexibility so that they may pursue an individualized course of study. Additional courses beyond those listed on this proposal may be added with approval of the certificate director. Finally, a three credit experiential learning component will be required, for a total of 18 credit hours. This may be an internship within the U.S. or abroad, or a research experience under the guidance of a member of the sociolegal studies certificate faculty.
Please consult the certificate program advisor for a list of approved courses in each area.

Enrollment Requirements: Students who have attained junior standing (56 credit hours) in any undergraduate degree program at ASU are eligible for admission to the certificate in socio-legal studies. There are no formal admissions procedures, but students should contact the certificate in socio-legal studies program director or advisor as soon as they decide to pursue the certificate.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://justice.clas.asu.edu
WILSN 125
justiceinfo@asu.edu
480-965-7682

## Southeast Asian Studies Certificate (LASALCERT) <br> Campus: TEMPE

Description: The certificate in Southeast Asian studies can supplement a bachelor's degree, demonstrating knowledge of a Southeast Asian language and knowledge of Southeast Asian history, art, culture and society.
This certificate prepares students for admission to graduate programs in Southeast Asian-area studies or in an academic discipline with a focus on Southeast Asia, or foradvanced programs in international law, journalism, business or other professional fields. Recent graduates have gone on to enter medical school, M.B.A. programs and doctoral programs. An earned certificate will appear on student transcripts as a Southeast Asian studies emphasis.

Program Requirements: A certificate in Southeast Asian studies is available to any undergraduate student. The certificate program requires a simultaneous two-year sequence in a Southeast Asian language (Indonesian, Thai or Vietnamese) and 18 credit hours, including the three courses listed below plus two electives (selected from an approved list) and a 3-credit capstone project. ASB/GCU/HST/POS/REL 240 Introduction to Southeast Asia
ASB 325 Peoples of Southeast Asia
HST 391 Modern Southeast Asia

Enrollment Requirements: There are no specific admission requirements other than a student's desire to learn about Southeast Asia. A minimum grade of " $C$ " (2.00) is required for each course that is used to fulfill the certificate requirements. Please contact the department for more information: http://www.asu.edu/clas/asian/certificate.html.

## Contact Information:

Liberal Arts and Sciences, College of
Dean, College of Liberal Arts and Sciences
http://www.asu.edu/clas/asian/
COOR 3rd floor advising center
SHPRSadvising@asu.edu
480-965-8364

## Spanish for the Professions Certificate (LSSPPRFCER)

## Campus: DTPHX

Description: The series of courses in this 18 -credit-hour certificate will help students hone Spanish communication skills and cultural knowledge to serve the needs of the U.S.-Latino community in professional settings (i.e., education, social work, health care, criminology, journalism). This program is only offered on the ASU Downtown Phoenix campus and is open to current ASU students as well as members of the community. The combination of professionally focused courses and practical experience in this certificate will enhance students' professional skills in positions that require advanced proficiency in Spanish and in-depth understanding of U.S.-Latino culture.

Program Requirements: Pre-requisite: SPA 314/316 or permission of instructor.
SPA 494/401
SPA 494/402
SPA 494/403*
SPA 494/404*
SPA 494/405*
SPA484/SPA 499**
Internship or Independent Study
*Pre-requisite: SPA 494 Spanish Oral/Written Communication for the Professions or permission of the instructor.
**Pre-requisite: A minimum of 12 credit hours completed in this certificate and permission of the instructor.
All courses for this certificate will require a minimum grade of " $C$ " (2.00) or better to get credit toward fulfilling minor requirements.
Enrollment Requirements: For additional admission and registration requirements, please visit the school's website.

## Contact Information:

Letters and Sciences, School of
School of Letters \& Sciences
http://sls.asu.edu/lc/spanish/certificate.html
UCENT 300
sls@asu.edu
602-496-4000

## Special Events Management Certificate (HSRTMUERT)

Campus: DTPHX
Description: The special events management certificate is a career enhancement program offered to nondegree-seeking students or those who already have a degree from an accredited university in any major, or students currently pursuing a bachelor's degree in any major.

Program Requirements: The certificate requires a total of18 credit hours,fifteen credit hours of required core courses and three credits of electives. Courses taken as part of a university major may count towards both that degree and the certificate. To earn the certificate, students must complete all course work in the certificate with a minimum grade of "C" or better. An application to the program is required.
Required core courses (15)

PRM 486 Special Events Management (3)
PRM 422 Entertainment, Protocol and Programming for Special Events (3)
PRM 423 Special Event Operations and Site Design (3)
PRM 427 Revenue Generation for Special Events Management (3)
PRM 488 Business Practices for Special Events Management (3)
Elective courses (3)
TDM 205 Introduction to Travel and Tourism (3)
NLM 310 Volunteer Management (3)
TDM 350 Tourism Marketing (3)
TDM 345 Meeting and Convention Planning (3)
PRM 475 Entrepreneurial Recreation and Tourism (3)
PRM 487 Special Events Management Advanced (3)

Standards

- A minimum "C" (2.00) grade required for all classes in the certificate.
- A minimum GPA of 2.00 for those pursuing the certificate.
- Eighteenhours of graded classroom coursework (no internship, no independent study).
- Must be a junior to take 400 -level courses.

Enrollment Requirements: Student wishing to pursue the special events management certificate should consult with an academic advisor in the School of Community Resources and Development. For additional information, please visit the official website.

## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://scrd.asu.edu
UCENT 500
scrd@asu.edu
602-496-0550

## Speech-Language Pathology Assistant Certificate (LASLPACERT)

Campus: TEMPE

Description: The Speech-Language Pathology Assistant (SLPA) certificate prepares students to work with individuals with communication disorders under the direction of a speech language pathologist (SLP). Students majoring in speech and hearing science or persons already holding a bachelor's degree in speech and hearing science receive additional coursework and clinical training to be eligible for SLPA licensure and for positions working under the direction of an SLP in schools, clinics and rehabilitation agencies that provide speech and language services.

Program Requirements: The SLPA certificate includes 15 credit hours of coursework and clinical internships completed in conjunction with the bachelor's in speech and hearing science. The student must take SHS 402, 473 and 483 and complete two internships of clinical practice (SHS 484). Twelve of the 15 credit hours for the SLPA certificate must be completed at ASU. A minimum grade of " $\mathrm{B}-$ " is required for a course to count toward the certificate.

Enrollment Requirements: Students who have completed 15 credit hours in speech and hearing science coursework with at least a 2.75 grade point average in those courses are eligible to apply. Applications will also be accepted from students who have completed a bachelor's degree in speech and hearing science or communication disorders from a program accredited by the American Speech-Language-Hearing Association (ASHA), providing their grade point average in the major was at least 2.75. Please contact the Department of Speech and Hearing Science for more information.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Speech and Hearing Science
http://shs.asu.edu/slpa
COOR 2211

## Symbolic Systems Certificate (LAPHICERT)

Campus: TEMPE
Description: The School of Historical, Philosophical and Religious Studiesoffers a certificate in symbolic systems. The certificate program takes an interdisciplinary approach to cognition, computation and meaning.
Course work is divided evenly between philosophy, psychology and computer science in order to expose students to the subject matter from a conceptual, empirical and practical point of view.
The certificate may interest students with majors in any of the three disciplines, or students who wish to add breadth to their degree through work in other disciplines, on topics of common interest.

Program Requirements: The certificate in symbolic systems consists of 28 credit hours approved by an advisor in the School of Historical, Philosophical and Religious Studies as follows:
CSE 200, 210 and 240
PSY 230 and 290 and either PSY 323, 324 or 437
One of either PHI 319 or 333
Either PHI 315 or 317
Either PHI 312 or 314
With approval from the director of undergraduate studies in the philosophy, substitution courses from outside this list may be allowed.
All courses must be passed with a minimum grade of " $C$ " (2.00).
Enrollment Requirements: Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact theSchool of Historical, Philosophicaland Religious Studies advising centerfor more information.

## Contact Information:

Liberal Arts and Sciences, College of Historical, Philosophical \& Religious Studies, Sch
http://shprs.clas.asu.edu/symbolic_systems
COOR
SHPRSadvising@asu.edu
480-965-8364

## Technical Communication Certificate (LSTECCERT)

## Campus: DTPHX

Description: Through the technical communication program, students learn how to produce, design and manage information, using both traditional and developing technologies

Program Requirements: The undergraduate certificate requires 18 hours. The following courses are required:
TWC 301 General Principles of Multimedia Writing
TWC 401 Principles of Technical Communication
Choose one of the following courses:
TWC 411 Principles of Visual Communication
TWC 421 Principles of Writing with Technology
TWC 431 Principles of Technical Editing
Choose three other 400-level TWC courses, of which at least two must be genre or information courses, such as TWC 443 Proposal Writing or TWC 452 Information in the Digital Age.

Enrollment Requirements: The certificate is available to all admitted undergraduate students (regular or nondegree) at ASU. Once students have been admitted, they are eligible to enroll in courses to complete the certificate program. Applications are accepted throughout the year.

Please contact the school for more information.
For U.S. Department of Education Gainful Employment Program Disclosure information, see http://catalog.asu.edu/files/shared/GE Disclosure ECTWCCERT.pdf.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Dean, Ira A. Fulton Schools of Engineering
http://engineering.asu.edu/entrepreneurship
BYENG 696
engineering@asu.edu
480-965-8211

## Technical Communication, Post Baccalaureate Certificate (LSTECGRCT)

Campus: DTPHX

Description: Through the technical communication program, students learn how to produce and communicate technical information, using both traditional and digital technologies.

Program Requirements: The post-baccalaureate certificate requires 18 hours, including the following classes:
TWC 501 Principles of Technical Communication
Choose two of the following courses:
TWC 511 Principles of Visual Communication
TWC 521 Principles of Writing with Technology
TWC 531 Principles of Technical Editing
Choose three other 500-level TWC courses, of which at least two of which must be genre or information courses, such as TWC 543 Proposal Writing or TWC 552 Information in the Digital Age.

Enrollment Requirements: Students must be admitted to ASU with graduate standing-either in another graduate program or as a nondegree-seeking graduate student. Please contact the department for more information and see http://techcomm.asu.edu/degrees.shtml.

For U.S. Department of Education Gainful Employment Program Disclosure information, seehttp://catalog.asu.edu/files/shared/GE Disclosure ECTWCGRCT.pdf.

## Contact Information:

Letters and Sciences, School of
School of Letters and Sciences
http://techcomm.asu.edu/
SANCA 233
SAAS@asu.edu
480-727-1526

## Technology Entrepreneurship Certificate (ESTNECERT)

## Campus: TEMPE

Description: Engineers and scientists around the globe launch high-tech companies to move their ideas to the market. Studies show that the majority of innovative products and services in the economy evolve from entrepreneurial ventures. By providing knowledge and skills important to the creation and leadership of such startups, the certificate program in technology entrepreneurship aims to train the founders and leaders of tomorrow's high-tech ventures. The certificate program is designed specifically for engineers. Courses are approached from the perspective of the student whose primary interest is in technological innovation, whose primary concentration is engineering and who has little or no prior business education.

Program Requirements: This 15-credit-hour certificate program is limited to students in the Ira A. Fulton Schools of Engineering and is designed to help technically oriented students analyze, launch and operate an entrepreneurial venture. The certificate program in technology entrepreneurship requires that students enroll in and complete five courses. Admission to the cohort portion of the certificate program can only occur after successful completion of the introduction course, FSE 301 Entrepreneurship for Engineers
(prerequisite: junior standing in a bachelor's program in the Ira A. Fulton School of Engineering). Once admitted to the certificate program, students must also successfully complete the remaining certificate courses:
FSE 400 Creating and Launching a Technology Venture
FSE 401 Intellectual Property for a Technology Venture
FSE 402 Operating a Technology Venture
FSE 403 Entrepreneurship Practicum
Enrollment Requirements: The qualifications for admission to the certificate in technology entrepreneurship program are having junior standing in a bachelor's program in the Ira A. Fulton Schools of Engineering and successful completion of the selection interview process.
The selection interview process consists of two parts, 1) a letter of intent written by the student to the selection committee, and 2) a live interview with the selection committee, which consists of at least one faculty member, one entrepreneurship program advisory board member and one member of the regular engineering faculty.
Each selection interview is conducted according to a fixed format, with each certificate program candidate having the opportunity to respond to the same set of questions. Please contact the department for more information.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Dean, Ira A. Fulton Schools of Engineering
http://engineering.asu.edu/entrepreneurship
BYENG 696
engineering@asu.edu
480-965-8211

## Translation Certificate (LASPACERT)

## Campus: TEMPE

Description: The translation certificate program is designed to provide:

- Advanced training required for professional translation in both public and private sectors.
- Preparation for the rigorous examinations required by national and international agencies.
- Training as an ancillary skill for professional fields, such as international business, public health, medicine and law, in accordance with guidelines recommended by the American Translators Association.

Program Requirements: The certificate program consists of the following requirements:

## Prerequisites

SLC 400 Linguistics, SB (3) or SPA 400 Introduction to Spanish Linguistics (3) or equivalent SPA 412 Advanced Conversation and Composition, G (3)
Required

- SLC 401 Translation Theory and Practice (3)
- In-service practicum, SLC 484 Internship (2)

Also required are nine hours of applied translation electives in specialized areas chosen from the following courses:
SLC 481 Technical and Scientific Translation (3)
SLC 482 Business and Financial Translation (3)
SLC 483 Medical and Legal Translation (3)
SLC 485 Problems of Literary Translation (3)

Enrollment Requirements: Since entrance to professional translation is through work, cultural experience and examination, the entrance requirements to this certificate program are 1) a written proficiency examination in the source and the receptor languages at the level of completion of an advanced composition course in Spanish (SPA 412) and English (ENG 301), and 2) extensive work experience using Spanish and English, or demonstrated bilingual writing competence in English and Spanish.
Please contact the school for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/certificates
LL 440
silc@asu.edu
480-965-6281

## Women and Gender Studies Certificate (LAWSTCERT)

Campus: TEMPE
Description: Women and gender studies, in the School of Social Transformation provides students with an intensive interdisciplinary liberal arts education that enables them to write well, think critically and analyze problems effectively. The certificate program is equivalent to an interdisciplinary minor.

Program Requirements: The certificate program consists of 18 credit hours, 12 of which must be upper-division courses. Students pursuing a certificate in women and gender studies must consult with the women and gender studies advisor to select appropriate courses and fulfill requirements. A certificate of concentration in women and gender studies is awarded for the successful completion of WST 100 (or WST 300) and WST 377, or WST 378 and an additional 12 credit hours from the list of approved women and gender studies courses.

Enrollment Requirements: Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the women and gender academic specialist in the school for more information.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://wgs.asu.edu/
WHALL 205
wgs.asutempe@asu.edu
480-965-2358

## Women's Studies Certificate (ASWSTCERT)

Campus: WEST
Description: The certificate in women's studies, within the New College of Interdisciplinary Arts and Sciences, is an interdisciplinary program emphasizing intersectional approaches to the study of gender, race, class, ethnicity, and sexuality in national and transnational contexts.

Program Requirements: The women's studies certificate consists of 18 credit hours of course work, of which 15 credit hours must be upper division (300-400 level).
Core requirements (9 credit hours):

WST 100, Women, Gender, and Society, SB, C (3) or WST 300, Women and Gender in Contemporary Society, SB, C (3)
WST 380, Race, Gender, and Class, SB, C (3)
WST 498, PS: Theory and Methods in Women and Gender Studies, L (3)
WST electives (9 credit hours).
Enrollment Requirements: The certificate in women's studies, within the New College of Interdisciplinary Arts and Sciences, is an interdisciplinary program emphasizing intersectional approaches to the study of gender, race, class, ethnicity and sexuality in national and transnational contexts. The women's studies certificate is recommended for graduate students, nondegree students and students majoring in professional programs.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/certificates/womenstudies
FAB N201
harcs.dept@asu.edu

## Writing Certificate (LAENGCERT)

## Campus: TEMPE

Description: The writing certificate is a declaration from ASU that a student has completed advanced writing instruction. It certifies that the student has had the training to be a successful writer in his or her chosen profession.

Program Requirements: The writing certificate consists of 19 credit hours. Required courses are as follows:
ENG 216 Persuasive Writing on Public Issues, L (3), or ENG 412 Creative Nonfiction (3)
ENG 301 Writing for the Professions, L (3)
ENG 372 Document Production, L (3)
ENG 472 Rhetorical Studies, L (3)
ENG 484 Internship: Writing Certificate (3)
ENG 498 Pro-Seminar: Writing Certificate Portfolio (1)
Also required is an additional writing course in English (three hours) or a writing or design course (three hours) selected from an approved list of courses from across campus. All students are required to submit a portfolio before receiving the certificate.

Enrollment Requirements: Application to the program requires a minimum GPA of 3.00 in ENG 101 and 102, 105, or 107 and 108. Students must also have completed at least 30 hours of course work and must have a minimum cumulative GPA of 3.00 . Please contact the department for more information.

## Contact Information:

Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/writingcertificate
LL 542
englishadvising@asu.edu
480-965-3168

## Writing Program Certificate (ASWRTCERT)

Campus: WEST
Description: Comprised of a minimum of 19 credit hours, the writing certificate combines intensive course work (of which at least 12 credit hours must be upper division) and an exit portfolio. Students will choose one of five track options:

- Creative writing.
- Generalist.
- Professional and technical writing.
- Publishing and editing.
- Nonfiction writing.

Exit portfolio: Students will assemble a portfolio of writing that demonstrates their grasp of the skills presented during their course of studies.

Program Requirements: To gain admission to the writing certificate students must demonstrate fundamental writing skills through the completion of English composition (101/102, or $107 / 108$, or 105 ) with grades of " $B$ " (3.00, on a scale of 4.00 ) or higher. Students are required to submit an application, which includes at least three samples of writing from lower-division courses or independent writing projects. Applications must be submitted at least two months before the start of the semester they anticipate being admitted.

Enrollment Requirements: The Division of Humanities, Arts and Cultural Studies offers this program to students enrolled in any unit of any college at ASU. Certification of advanced writing skills opens the way to a vast array of opportunities, from journalism and publishing to public advocacy, military and government careers, elementary and secondary education, business management, economic development, the law and high-tech industry. Ability to communicate clearly and directly is a key to career advancement in all aspects of business, government and community service.

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/certificates/writing
FAB N201
harcs.dept@asu.edu
602-543-4444

## Undergraduate Programs

## Undergraduate Degrees (Program Descriptions)

Business, W. P. Carey School of

## Accountancy, BS (BAACCBS)

Campus: TEMPE, WEST

Program Description: The School of Accountancy's undergraduate program has two possible tracks during the senior year. The Accounting Bachelor of Science track is followed by most students and is designed to provide a rich educational experience. The Accounting Scholars Program track is designed for our most highly qualified students who wish to commit during the second semester of their junior year (and are accepted) into the Master of Accountancy Program at ASU or the Master of Taxation program; it provides them a particularly rich and individualized educational experience during their senior and fifth years. It includes a number of distinct advantages for students:

- A spring internship experience.
- Increased personal interaction among students, faculty and staff.
- Possible reduced overall tuition costs through scholarships.

Further details on the accounting scholars track are available at the school website.
Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 210 Brief Calculus.
Admission Requirements: Freshmen admission requirements: 1160 SAT Reasoning OR 25 ACT score, OR graduated in the top eight percent of high school class.
Freshmen should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey's Business B.A. programs or any other business or other degree program outside W. P. Carey School of Business. Students who are not admissible to a W. P. Carey Business B.S. major and who did not select a second major or are not admissible to their second major choice will be placed in a Business B.A. program in W. P. Carey School of Business.
Transfer admission requirements (30 or more semester hours of credit after high school): 3.00 transfer GPA AND 1,160 SAT score OR 25 ACT score OR graduated in the top 8th percent of high school class.
Transfer students should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey's Business B.A. programs or any other business or other degree program outside W. P. Carey School of Business.
Students with fewer than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.
Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Arizona Western College, Coconino Community College, Maricopa County Community College District, Yavapai College.

Career Opportunities: The major in accountancy includes the essential academic preparation for students who are:

- Planning to pursue a graduate degree or attend law school.
- Pursuing professional careers in public, corporate and governmental accounting.
- Seeking positions in consulting; planning to operate their own businesses.
- Seeking positions in personal financial planning and portfolio analysis.

The job outlook for accounting graduates is excellent. The U.S. Bureau of Labor Statistics' Occupational Outlook Handbook (20082009) states, "Employment of accountants and auditors is expected to grow by 18 percent between 2006 and 2016, which is faster than the average for all occupations."

## Contact Information:

Business, W. P. Carey School of

School of Accountancy
http://wpcarey.asu.edu/accounting/index.cfm
BA 223Q
wpcareyacc@asu.edu
480-965-3631

## Business (Communication), BA (BABUSCBA) <br> Campus: ONLNE, POLY, TEMPE, WEST

Program Description: The B.A. in business with a concentration in communication is an innovative, interdisciplinary program intended to prepare students for positions in a variety of professions in which business and communication play an important role in ensuring success. Graduates of this program will have specific knowledge of business practices and the capacity to effectively communicate complex business information. Students in this program will complete rigorous courses within the communication concentration in addition to the skill and core courses required of all W. P. Carey School of Business majors.

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.
Admission Requirements: Freshman and transfer students must submit either an SAT Reasoning test score or an ACT test score by the end of the first semester in the program (we do not require the writing portion of these tests). There is no minimum score requirement.
Freshman admission requirements for this program are the same as the university's freshman admission requirements. Transfer applicants must have a 3.00 GPA for all transfer work and meet university transfer admission requirements. Transfer students should select an additional major, which must be outside W. P. Carey School of Business, when applying for admission. Students with fewer than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.
Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Arizona Western College, Central Arizona College, Eastern Arizona College, Maricopa County Community College District.

Career Opportunities: Business communication has exploded as a distinct professional field as companies require rapid and considered responses, from conveying ordinary information to crisis communications. Historically these positions have been staffed with people trained in communication, English, journalism or other fields who lack specific business knowledge. Graduates of this program will be qualified to enter these positions with knowledge that will be immediately useful to potential employers while advancing their careers.

## Contact Information:

Business, W. P. Carey School of
W. P. Carey School of Business
http://wpcarey.asu.edu
BA 109
wpcareyug@asu.edu
480-965-4227

## Business (Global Politics), BA (BABUSGPBA)

Campus: TEMPE
Program Description: The program incorporates solid business skills and global understanding in order to prepare students to realize and analyze the relationship between business and social science. Students in this program will complete the rigorous courses within the global politics concentration in addition to the skill and core courses required of all W. P. Carey School of Business majors.

Additional Program Fee: Y .
Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.

Admission Requirements: Freshman and transfer students must submit either an SAT Reasoning test score or an ACT test score by the end of the first semester in the program (we do not require the writing portion of these tests). There is no minimum score requirement.
Freshman admission requirements for this program are the same as the university's freshman admission requirements. Transfer applicants must have a 3.00 GPA for all transfer work and meet university transfer admission requirements. Transfer students must select an additional major, which must be outside W. P. Carey School of Business, when applying for admission. Applicants not meeting requirements for this program but who do meet university minimum requirements for transfer studies will be admitted to their second choice.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Arizona Western College, Central Arizona College, Coconino Community College, Eastern Arizona College, Maricopa County Community College District, Mohave Community College, Pima Community College, Yavapai College.

Career Opportunities: Students completing the global politics concentration will think critically about global problems and integrate inquiry and action in order to become responsible leaders. These students will be prepared to successfully launch careers in many fields including:

- Campaign and issue management.
- Information analysis.
- Public relations.


## Contact Information:

Business, W. P. Carey School of
W. P. Carey School of Business
http://wpcarey.asu.edu
BA 109
wpcareyug@asu.edu
480-965-4227

## Business (Law), BA (BABUSLBA)

Campus: TEMPE

Program Description: The B.A. in business with a concentration in law is an innovative, interdisciplinary program intended to prepare students for positions in a variety of professions in which business and law play an important role in ensuring success. Coupled with a strong business background, the law concentration will give students a systematic framework for analyzing realworld legal regulation and corresponding business risks and liabilities. Students in this program will complete rigorous courses within the law concentration in addition to the skill and core courses required of all W. P. Carey School of Business majors.

## Additional Program Fee: Y.

Second Language Requirement: $N$.
First Required Math Course: MAT 210 Brief Calculus.

Admission Requirements: Freshman and transfer students must submit either an SAT Reasoning test score or an ACT test score by the end of the first semester in the program (we do not require the writing portion of these tests). There is no minimum score requirement.
Freshman admission requirements for this program are the same as the university's freshman admission requirements.
Transfer applicants must have a 3.00 GPA for all transfer work and meet university transfer admission requirements. Transfer students should select an additional major, which must be outside W. P. Carey School of Business, when applying for admission. Students with fewer than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.
Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Arizona Western College, Central Arizona College, Coconino Community College, Eastern Arizona College, Maricopa County Community College District, Mohave Community College, Pima Community College, Yavapai College.

Career Opportunities: The law concentration is designed to expose students who will pursue careers in the business world to aspects of law and legal issues relevant to their career goals. Graduates of this program will be prepared to use their skills in a variety of industries ranging from new business ventures to corporate or agency compliance.

## Contact Information:

Business, W. P. Carey School of
W. P. Carey School of Business
http://wpcarey.asu.edu
BA 109
wpcareyug@asu.edu
480-965-4227

## Business (Public Service and Public Policy), BA (BABUSPBA)

Campus: TEMPE
Program Description: The concentration in Public Service and Public Policy (PSPP) prepares students for work in public, nonprofit, and private sectors through comprehensive coverage of topics in public policy and public administration. Students will become familiar will leading a public organization and the process of policy development. The program also enables students to examine the public sector through multiple lenses and address the challenges it faces in a practical way. Graduates are prepared for professional careers in public service, and the program offers preparation for students who wish to pursue graduate degrees in public administration, public policy, law, nonprofit administration, or other public service and policy-oriented areas.

Additional Program Fee: Y.
Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.

Admission Requirements: Freshman and transfer students must submit either an SAT Reasoning test score or an ACT test score by the end of the first semester in the program. We do not require the writing portion of these tests. There is no minimum score requirement.
Freshman admission requirements for this program are the same as the university's freshman admission requirements. Transfer applicants must have a 3.00 GPA for all transfer work and meet university transfer admission requirements. Transfer students should select an additional major, which must be outside W. P. Carey School of Business, when applying for admission. Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.
Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Arizona Western College, Central Arizona College, Coconino Community College, Eastern Arizona College, Maricopa County Community College District, Pima Community College, Yavapai College.

Career Opportunities: Increasing demand for public services and retiring baby boomers have created an increase in job opportunities for graduates in the public sector. The Partnership for Public Service estimates that the federal government alone will hire nearly 273,000 new employees by 2012 for mission-critical positions.

## Contact Information:

Business, W. P. Carey School of
W. P. Carey School of Business
http://wpcarey.asu.edu/undergraduate/index.cfm
BA 109
wpcareyug@asu.edu
480-965-4227

## Business (Sustainability), BA (BABUSSBA)

Campus: TEMPE, WEST

Program Description: The B.A. in business with a concentration in sustainability is an innovative, interdisciplinary program intended to prepare students for positions in a variety of professions in which business and sustainability play an important role in ensuring success. Finding ways to grow and prosper while reducing the stress on the global environment is a critical issue facing today's society. Combining the latest trends in business with cutting-edge knowledge of sustainability prepares graduates to excel in a career area that will dramatically increase in demand. Students in this program will complete rigorous courses within the sustainability concentration in addition to the skill and core courses required of all W. P. Carey School of Business majors.

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.

Admission Requirements: Freshman and transfer students must submit either an SAT Reasoning test score or an ACT test score by the end of the first semester in the program (we do not require the writing portion of these tests). There is no minimum score requirement.
Freshman admission requirements for this program are the same as the university's freshman admission requirements.
Transfer applicants must have a 3.00 GPA for all transfer work and meet university transfer admission requirements. Transfer students should select an additional major, which must be outside W. P. Carey School of Business, when applying for admission. Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.
Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Arizona Western College, Central Arizona College, Coconino Community College, Eastern Arizona College, Maricopa County Community College District, Mohave Community College, Pima Community College, Yavapai College.

Career Opportunities: Interest in sustainability issues is growing and, most likely, will be increasingly important to business in the next few years. Businesses around the world are asking serious questions about how they can understand, evaluate and act on issues related to sustainability while making sensible business decisions for both the short and long run. They seek qualified individuals who understand the societal, scientific and business aspects of the issues. Graduates from this degree program will fill these needs.

## Contact Information:

Business, W. P. Carey School of
W. P. Carey School of Business
http://wpcarey.asu.edu
BA 109
wpcareyug@asu.edu
480-965-4227

## Business (Tourism), BA (BABUSTBA) <br> Campus: TEMPE, WEST

Program Description: The B.A. in business with a concentration in tourism is an innovative, interdisciplinary program intended to prepare students for positions in a variety of professions in which business and tourism play an important role in ensuring success. Developing tourism and recreation opportunities requires an understanding of effective marketing techniques and the ability to interact with many different types of businesses that support those efforts. A solid academic preparation in business will help prepare you for success in the tourism industry and affiliated professions. Students in this program will complete rigorous courses within the tourism concentration in addition to the skill and core courses required of all W. P. Carey School of Business majors.

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Additional Program Fee: Y.
Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.
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Admission Requirements: Freshman and transfer students must submit either an SAT Reasoning test score or an ACT test score by the end of the first semester in the program (we do not require the writing portion of these tests). There is no minimum score requirement.

Freshman admission requirements for this program are the same as the university's freshman admission requirements. Transfer applicants must have a 3.00 GPA for all transfer work and meet university transfer admission requirements. Transfer students should select an additional major, which must be outside W. P. Carey School of Business, when applying for admission. Students with fewer than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.
Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Arizona Western College, Central Arizona College, Coconino Community College, Eastern Arizona College, Maricopa County Community College District, Mohave Community College, Pima Community College, Yavapai College.

Career Opportunities: Tourism management and development combines marketing and economic development, with emphasis on managerial understanding to promote smooth operations. The combination of skills acquired from exposure to both business and tourism courses will make these graduates more marketable and productive in their careers.

## Contact Information:

Business, W. P. Carey School of
W. P. Carey School of Business
http://wpcarey.asu.edu
BA 109
wpcareyug@asu.edu
480-965-4227

## Business (Urban Policy), BA (BABUSUBA)

Campus: TEMPE, WEST
Program Description: The B.A. in business with a concentration in urban policy is an innovative, interdisciplinary program intended to prepare students for positions in a variety of professions in which business and urban policy play an important role in ensuring success. Economic development and urban planning are inextricably linked. The urban policy concentration will prepare you to address many of the challenges of rapid urban growth. Students in this program will complete rigorous courses that focus on the complexity and range of issues affecting the quality of urban planning and development in addition to the skill and core courses required of all W. P. Carey School of Business majors.

## Additional Program Fee: Y .

Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.
Admission Requirements: Freshman and transfer students must submit either an SAT Reasoning test score or an ACT test score by the end of the first semester in the program (we do not require the writing portion of these tests). There is no minimum score requirement.
Freshman admission requirements for this program are the same as the university's freshman admission requirements.
Transfer applicants must have a 3.00 GPA for all transfer work and meet university transfer admission requirements. Transfer students should select an additional major, which must be outside W. P. Carey School of Business, when applying for admission. Students with fewer than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.
Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Arizona Western College, Central Arizona College, Coconino Community College, Eastern Arizona College, Maricopa County Community College District, Mohave Community College, Pima Community College, Yavapai College.

Career Opportunities: Historically, urban planners have had little business background, but function in a system where business success is a key ingredient in high-quality, dynamic, urban policy. Graduates with a B.A. in business with an urban policy concentration will be equipped to deal with the wide range of economic and business development issues.

## Contact Information:

Business, W. P. Carey School of
W. P. Carey School of Business
http://wpcarey.asu.edu
BA 109
wpcareyug@asu.edu
480-965-4227

## Business Exploratory, Pre-Prof/E (BABUSEXP)

Campus: TEMPE

Program Description: Virtually every profession and organization uses business in some way. Business exploratory students have an opportunity to explore a variety of areas in business prior to selecting one of our seven majors:

- Accountancy.
- Computer information systems.
- Economics.
- Finance.
- Management.
- Marketing.
- Supply chain management.

Students have an opportunity to work with world-class faculty in an environment that values high quality teaching. Our majors provide students with the skills and knowledge needed in today's companies - whether they are starting their own businesses or working in large multinational corporations. Additionally, many graduates attend some of the best graduate schools in the country in a variety of disciplines.

Additional Program Fee: $N$.
Second Language Requirement: $N$.
First Required Math Course: MAT 210 Brief Calculus.
Admission Requirements: This major has higher admission standards. To be admitted, freshmen need a 1160 SAT Reasoning score OR 25 ACT score, OR they must be among the top eight percent of their graduating high school class.
Transfer students (with 30 or more semester hours of credit after high school) must have a 3.00 GPA or higher, AND an SAT Reasoning score of 1160 OR a ACT score of 25 OR graduated in the top eight percent of their high school class.

Career Opportunities: Students in business exploratory will graduate from one of seven degrees in the W. P. Carey School of Business. See those degrees for career opportunities.

## Contact Information:

Business, W. P. Carey School of
Prebusiness Office
http://wpcarey.asu.edu
BA 109
wpcareyug@asu.edu
480-965-4227

## Computer Information Systems, BS (BACISBS)

Campus: POLY, TEMPE, WEST

Program Description: With a degree in computer information systems, your career choices are limitless. CIS is part of every business and organization. Invest in a degree that teaches you about the exciting and innovative ways that information technology is used to help organizations succeed. Currently there is a shortage of information systems professionals, and many more jobs than graduates. With the help of our dedicated faculty, you will learn how to design, build and maintain information systems that support both business operations and managerial decision-making. In particular, you will learn about:

- Business intelligence for competitive advantage.
- Business process for workflow redesign.
- Data management for decision making.
- Distributed systems for collaboration and globalization.
- Enterprise integration for synergy.
- Project management.
- Solution development for value creation.

This is your opportunity to join a team of motivated students and become part of one of the nation's highest ranked computer information systems departments.

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 210 Brief Calculus.

Admission Requirements: Freshmen admission requirements: 1160 SAT Reasoning OR 25 ACT score, OR graduated in the top eight percent of high school class.
Freshmen should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey's Business BA programs or any other business or other degree program outside W. P. Carey School of Business. Students who are not admissible to a W. P. Carey Business BS major and who did not select a second major or are not admissible to their second major choice will be placed in a Business BA program in W. P. Carey School of Business.
Transfer admission requirements ( 30 or more semester hours of credit after high school): 3.00 transfer GPA AND 1160 SAT score OR 25 ACT score OR graduated in the top eight percent of high school class.
Transfer students should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey's Business BA programs or any other business or other degree program outside W. P. Carey School of Business.
Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.
Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: A computer information systems degree offers job opportunities in a variety of industries, including:

- Education.
- Entertainment.
- Finance.
- Health care.
- National defense.
- Transportation.

Information systems are a key component in the success of other functional business areas such as accounting, supply chain, finance and marketing. Entry-level information systems positions include:

- Computer forensics analyst.
- Database administrator.
- Systems analyst.
- Information systems consultant.
- Information technology security manager.
- Network administrator.
- Project manager.
- Software/systems developer.
- Systems administrator.

Long-term career aspirations for a student with a computer information systems degree include:

- Chief executive officer.
- Chief information officer.
- Chief knowledge officer.
- Chief technology officer.
- Chief security officer.


## Contact Information:

Business, W. P. Carey School of
Department of Information Systems
http://wpcarey.asu.edu/information-systems/undergraduate/index.cfm
BA 301P
wpcareyis@asu.edu
480-965-3252

## Economics, BS (BAECNBS)

## Campus: TEMPE, WEST

Program Description: The program requires a strong core of economic theory, supplemented by mathematics and data analysis. Students in our B.S. program choose from a variety of electives within the department, as well as in the W. P. Carey School of Business and the university. All students are encouraged to develop programs of study tailored to their individual needs and interests. The department's undergraduate program aims to provide students with the critical thinking and communication skills needed to succeed in business or graduate school. The mission of the Department of Economics at Arizona State University is to provide the highest quality instruction to our students, conduct cutting-edge research in economics, and provide leadership and service to our professional communities.

Additional Program Fee: Y.
Second Language Requirement: N .
First Required Math Course: MAT 210 Brief Calculus.

Admission Requirements: Freshmen admission requirements: 1160 SAT Reasoning OR 25 ACT score, OR graduated in the top eight percent of high school class.
Freshmen should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey's Business BA programs or any other business or other degree program outside W. P. Carey School of Business. Students who are not admissible to a W. P. Carey Business BS major and who did not select a second major or are not admissible to their second major choice will be placed in a Business BA program in W. P. Carey School of Business.
Transfer admission requirements ( 30 or more semester hours of credit after high school): 3.00 transfer GPA AND 1160 SAT score OR 25 ACT score OR graduated in the top eight percent of high school class.
Transfer students should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey's Business BA programs or any other business or other degree program outside W. P. Carey School of Business.
Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.
Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Arizona Western College, Coconino Community College, Maricopa County Community College District, Yavapai College.

Career Opportunities: A major in economics provides students with the analytical and quantitative skills needed to prepare them for careers in business, government or public policy. The program of study can also be tailored to prepare students for graduate programs in economics, business or law. Students interested in pursuing a Ph.D. in economics are strongly encouraged to minor or major in mathematics as well.
Graduates have taken positions:

- As consultants who serve as advisers to state and federal governments as well as private corporations.
- As corporate economists who collect data and make forecasts relevant to the firm's business.
- In banking and financial services firms.

Each year many graduates pursue studies at some of the best graduate schools in the country.

## Contact Information:

Business, W. P. Carey School of
Department of Economics
http://wpcarey.asu.edu/ecn
BAC 659
wpcareyecn@asu.edu
480-965-3531

## Finance, BS (BAFINBS)

Campus: TEMPE, WEST

Program Description: The finance department has a rich tradition of educating leaders that excel in all aspects of the discipline of finance. Whether ascending to the top ranks of the venture capital industry, executing multimillion-dollar real estate deals, or becoming successful entrepreneurs with ideas and drive that are all their own, our graduates are equipped to succeed.
In particular, our Investment Banking Industry Scholars Program mentors students interested in going to Wall Street. Our student investment management fund provides undergraduates the opportunity to manage a real-world investment portfolio worth hundreds of thousands of dollars.
The faculty is considered among the top finance departments in the world. Our professional advisory board, comprised of leading professionals from the financial services, manufacturing, energy, investment banking and real estate sectors, provides a sounding board for new ideas and a source of jobs for our top graduates.

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.

Admission Requirements: Freshmen admission requirements: 1160 SAT Reasoning OR 25 ACT score, OR graduated in the top eight percent of high school class.
Freshmen should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey's Business BA programs or any other business or other degree program outside W. P. Carey School of Business. Students who are not admissible to a W. P. Carey Business BS major and who did not select a second major or are not admissible to their second major choice will be placed in a Business BA program in W. P. Carey School of Business.
Transfer admission requirements ( 30 or more semester hours of credit after high school): 3.00 transfer GPA AND 1160 SAT score OR 25 ACT score OR graduated in the top eight percent of high school class.
Transfer students should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey's Business BA programs or any other business or other degree program outside W. P. Carey School of Business.
Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.
Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Arizona Western College, Coconino Community College, Maricopa County Community College District, Yavapai College.

Career Opportunities: Students majoring in finance are prepared for careers in:

- Consulting.
- Corporate financial management.
- Depository institutions.
- Financial services.
- Investment banking.
- Investment management.
- Portfolio analysis.


## Contact Information:

Business, W. P. Carey School of
Department of Finance

## Management, BS (BAMGTBS)

Campus: POLY, TEMPE, WEST
Program Description: The B. S. in management prepares students to become effective managers and team leaders by providing theoretical and conceptual knowledge, and building critical skills such as:

- Analytical research and problem solving.
- Communication.
- Critical thinking.
- Global applications.
- Leadership.
- Personal ethics and integrity.
- Teamwork.

The curriculum includes the fundamentals of the global economy, the world of e-business, ethics, human resource and strategic management, and collaborative team skills. Throughout the program, theories and concepts of management and ethical leadership are enhanced by experiencing and testing these concepts in skill-based exercises, case discussions and team-based project work, including community-based team projects in not-for-profit and for-profit business settings.

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 210 Brief Calculus.

Admission Requirements: Freshmen admission requirements: 1160 SAT Reasoning OR 25 ACT score, OR graduated in the top eight percent of high school class.
Freshmen should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey's Business BA programs or any other business or other degree program outside W. P. Carey School of Business. Students who are not admissible to a W. P. Carey Business BS major and who did not select a second major or are not admissible to their second major choice will be placed in a Business BA program in W. P. Carey School of Business.
Transfer admission requirements ( 30 or more semester hours of credit after high school): 3.00 transfer GPA AND 1160 SAT score OR 25 ACT score OR graduated in the top eight percent of high school class.
Transfer students should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey's Business BA programs or any other business or other degree program outside W. P. Carey School of Business.
Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.
Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Arizona Western College, Coconino Community College, Maricopa County Community College District, Yavapai College.

Career Opportunities: The management major prepares graduates for managerial leadership in a world characterized by:

- Corporate accountability.
- Cross-functional management.
- Demands for continuous process improvements to enhance the value chain.
- Ethical decision making.
- The fast pace of e-business.
- Growing technological sophistication.
- The need for skills in communicating and working with people, directing projects and managing change.
- Racial, cultural and gender diversity in the workforce.

Graduates with skills in these areas are likely to be recruited by:

- For-profit and not-for-profit organizations.
- High-tech firms.
- Large and small organizations.
- Management consulting firms.
- Service and manufacturing firms.


## Contact Information:

Business, W. P. Carey School of
Department of Management
http://wpcarey.asu.edu/management-degree/index.cfm
BA 323
wpcareymgt@asu.edu
480-965-3431

## Management (Entrepreneurship), BS (BAMGTEBS)

## Campus: TEMPE, WEST

Program Description: The entrepreneurship concentration prepares students to identify, evaluate and develop entrepreneurial opportunities, whether in existing companies or in new business ventures. The entrepreneurship concentration is grounded in the management major's emphasis on collaboration, leadership, communication and team building, but adds refined analytical, managerial and leadership skills appropriate for people who want to change the world through new product development and innovation.
Students in the entrepreneurship concentration frequently collaborate with students from across the university, in particular students in the Design and the Arts Institute and the School of Sustainability. Additionally, the topic of sustainability is strongly emphasized throughout the curriculum. Graduates have the option of starting their own businesses or working for companies that value their entrepreneurial abilities.

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.

Admission Requirements: Freshmen admission requirements: 1160 SAT Reasoning OR 25 ACT score, OR graduated in the top eight percent of high school class.
Freshmen should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey's Business BA programs or any other business or other degree program outside W. P. Carey School of Business. Students who are not admissible to a W. P. Carey Business BS major and who did not select a second major or are not admissible to their second major choice will be placed in a Business BA program in W. P. Carey School of Business.
Transfer admission requirements ( 30 or more semester hours of credit after high school): 3.00 transfer GPA AND 1160 SAT score OR 25 ACT score OR graduated in the top eight percent of high school class.
Transfer students should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey's Business BA programs or any other business or other degree program outside W. P. Carey School of Business.
Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.
Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Arizona Western College, Coconino Community College, Maricopa County Community College District, Yavapai College.

Career Opportunities: The entrepreneurship concentration within the management major prepares students for leadership in a world characterized by rapid new product development, short product life cycles, demands for continuous change and improvement, and the need to move quickly to capture value from fleeting opportunities. Embedded within the entrepreneurship concentration is a consistent focus on integrating skill sets from a wide range of business disciplines, as it is requisite of all entrepreneurs to be conversant across an ever-changing landscape of issues. Graduates with these skills are likely to be recruited by
smaller and family-owned firms, high-tech firms, for-profit and not-for-profit organizations, as well as larger organizations with an entrepreneurial bent. Management graduates also often start their own businesses.

## Contact Information:

Business, W. P. Carey School of
Department of Management
http://wpcarey.asu.edu/management-degree/index.cfm
BA 323
wpcareymgt@asu.edu
480-965-3431

## Marketing, BS (BAMKTBS)

Campus: TEMPE, WEST

Program Description: Students majoring in marketing gain an understanding of the science behind consumer behavior and the critical role that marketing plays in all organizations. In addition, they develop marketing skills that provide a competitive advantage in their careers. The nationally ranked and award-winning marketing faculty share a passion for teaching and mentoring undergraduate students. Faculty provide many productive ways for students to get involved in the life of our department and work with our business partners. The department is home to the Center for Services Leadership, the premier international center for the study of the science of services, and offers distinctive course work in professional sales, relationship management and sports business.

Additional Program Fee: Y.
Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.
Admission Requirements: Freshmen admission requirements: 1160 SAT Reasoning OR 25 ACT score, OR graduated in the top eight percent of high school class.
Freshmen should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey's Business BA programs or any other business or other degree program outside W. P. Carey School of Business. Students who are not admissible to a W. P. Carey Business BS major and who did not select a second major or are not admissible to their second major choice will be placed in a Business BA program in W. P. Carey School of Business.
Transfer admission requirements ( 30 or more semester hours of credit after high school): 3.00 transfer GPA AND 1160 SAT score OR 25 ACT score OR graduated in the top eight percent of high school class.
Transfer students should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey's Business BA programs or any other business or other degree program outside W. P. Carey School of Business.
Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.
Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Arizona Western College, Coconino Community College, Maricopa County Community College District, Yavapai College.

Career Opportunities: Through the proper selection of course work and other educational experiences, a marketing student may prepare for a variety of careers in areas such as:

- Business development.
- Business-to-business marketing.
- Customer relationship management.
- International marketing.
- Market research and information management.
- Marketing communications.
- Professional sales and relationship management.
- Retail management.
- Sales management.
- Services marketing.

The degree program provides fundamentals, flexibility and specialization opportunities.

## Contact Information:

Business, W. P. Carey School of
Department of Marketing
http://wpcarey.asu.edu/
BAC 460
wpcareymkt@asu.edu
480-965-3621

## Supply Chain Management, BS (BASCMBS)

Campus: TEMPE, WEST

Program Description: Supply chain managers coordinate the purchase of raw materials, manufacturing and transportation of materials across multiple vendors and multiple countries to provide the services and finished goods sitting on your local store shelf or online retailer. It is a key reason that you can buy an ever-increasing variety of goods and services at remarkably low prices.
The supply chain management program provides W. P. Carey School of Business students with an in-depth knowledge of integrated supply chain management. The curriculum focuses on:

- Execution systems.
- Logistics.
- Negotiations.
- Operations.
- Planning.
- Procurement.
- Strategy development.

Classes are small and use projects and case studies to bring the material to life.
Our program is consistently ranked as one of the top supply chain programs in the world, providing our students an opportunity to be recruited by many leading international companies in many different industries.

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 210 Brief Calculus.
Admission Requirements: Freshmen admission requirements: 1160 SAT Reasoning OR 25 ACT score, OR graduated in the top eight percent of high school class.
Freshmen should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey's Business BA programs or any other business or other degree program outside W. P. Carey School of Business. Students who are not admissible to a W. P. Carey Business BS major and who did not select a second major or are not admissible to their second major choice will be placed in a Business BA program in W. P. Carey School of Business.
Transfer admission requirements ( 30 or more semester hours of credit after high school): 3.00 transfer GPA AND 1160 SAT score OR 25 ACT score OR graduated in the top eight percent of high school class.
Transfer students should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey's Business BA programs or any other business or other degree program outside W. P. Carey School of Business.
Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.
Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Arizona Western College, Coconino Community College, Maricopa County Community College District, Yavapai College.

Career Opportunities: Career track progression can lead to the vice president level in supply-chain-related areas. Firms recruit ASU supply chain management graduates from around the world and in all sectors of the economy, including public and private,
manufacturing, service, health care and retail. Students from our program are highly sought after, and we have excellent placements. The following are some positions that our graduates have been hired into:

- Buyer/planner.
- Commodity manager.
- Distribution manager.
- Internet marketing analyst.
- Inventory specialist.
- Logistics planner.
- Materials manager.
- Operations planner/analyst.
- Planner or analyst.
- Product forecaster.
- Production coordinator.
- Production line manager.
- Production scheduler.
- Quality control specialist.
- Supply management analyst.


## Contact Information:

Business, W. P. Carey School of
Department of Supply Chain Management
http://wpcarey.asu.edu/supply-chain-management/
BA 446
wpcarey.scm@asu.edu
480-965-6044

## Design and the Arts, Herberger Institute for

## Architectural Studies, BSD (ARSTDBSD)

Campus: TEMPE
Program Description: Architects design buildings and environments that are useful, sustainable and aesthetically pleasing. This implies an understanding of people's needs, of the science and technology of building, and of the concepts of aesthetics. The faculty in The Design School offer a B.S.D. in architectural studies. In addition to developing knowledge and skills in architectural design, building technology, landscape architecture and professional practice, students are encouraged to select electives from a broad range of approved courses both within the institute and across the university. These electives may be selected to devise a minor, to further professional study, or in some other fashion enrich the student's academic experience.
This is an eight-semester program requiring sequential completion of studio course work (or its approved equivalent) at any point of entry.

Additional Program Fee: $N$.
Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.
Admission Requirements: Students are admitted to the major, but must pass a degree milestone to continue in the major at the end of the first year.

Career Opportunities: Graduates of the bachelor's degree program who wish to become licensed can complete their professional studies by attending graduate school and earning the accredited professional master's degree. In Arizona, other graduates work for registered architects for several years before taking their licensing examination. Some begin their careers working for small offices of 10 to 20 people, others work for very large firms, industries, corporations or governmental agencies.

## Contact Information:

Design and the Arts, Herberger Institute for
The Design School
http://herbergerinstitute.asu.edu/degrees/sala.php
CDN 162

## Art (Art Education), BFA (FAARTEBFA)

Campus: TEMPE

Program Description: The B.F.A. in art with a concentration in art education involves:

- How instructors and administrators can best facilitate the teaching of art.
- How people learn about art.
- Policy making in art.
- The study of art.

The program focuses on public and private K-12 instruction, art in higher education and educational programs in art museums. Students investigate issues in art teaching and learning from multiple perspectives, including:

- Art inquiry.
- Context.
- Development.
- Studio.
- Visual culture.

In addition to their art education course work, students are required to take course work in the various studio programs offered in the School of Art.

Additional Program Fee: N.
Second Language Requirement: N .
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: All art students will be admitted to ASU into the Bachelor of Arts (art studies) program. They must complete a series of requirements including foundational course work and successfully passing a portfolio review to be eligible for study in one of the school's Bachelor of Fine Arts degree programs, which include upper-division course work in the studio. There is no portfolio review process at the time of admission to ASU for freshmen.
Typically, students in their second year who are interested in studio art and art education will submit a portfolio for review after completing the core requirements and during completion of the last of the 12 hours of 200 -level art requirements. Students interested in art history or museum studies will submit a declaration form in the semester in which they complete 30 hours. The student's major will be changed upon successful completion of the portfolio. Students may choose to remain in and complete the Bachelor of Arts (art studies) in which case no portfolio is required.
Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements, apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.
Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to 1) the existence of parallel and equal courses in the college's curriculum, and 2) departmental or school evaluation of studio courses with respect to performance standards.
Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates who also complete the state certification requirements for an art specialist certificate can teach in public and private elementary schools, middle schools and high schools. Graduates who do not seek state certification may find opportunities for jobs with art museums and recreational or community service groups that offer art instruction.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
ART 102

## Art (Art History), BA (FAARTHBA)

## Campus: TEMPE

Program Description: The B.A. in art history is a comprehensive degree designed to train students to engage with visuality in multiple ways. It offers a diverse curriculum intended to foster critical understanding of the aesthetics, production, patronage and consumption of art. Eleven internationally recognized faculty offer classes across many cultures and time periods, geographies, and multiple approaches and methodologies.

Additional Program Fee: N.
Second Language Requirement: $Y$.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: Students meeting the university requirements for admission may matriculate in the Herberger Institute for Design and the Arts. Separate admission procedures and approvals are required for some programs within the college. Students must contact specific departments or schools for details.
Freshmen students applying to the Herberger Institute School of Art enter ASU as art exploratory majors in the School of Art. There is no portfolio review process at the time of admission to ASU for freshmen.

Typically students in their second year interested in studio art and art education will submit a portfolio for review once they have completed their core requirements and are completing the last of the 12 hours of 200-level art requirements; or if they are interested in art history or museum studies, they will submit a declaration form in the semester in which they complete 30 hours. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- the existence of parallel and equal courses in the college's curriculum, and
- departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates in art history at the bachelor's level find employment opportunities in commercial art galleries, entry-level jobs with art publications and in museums. A graduate degree is essential for professional jobs; a master's degree prepares individuals to teach at the community college level or to gain entry into museums, auction houses and publishing companies. The Ph.D. is a necessity for employment as a university or college teacher, and for responsible administrative posts in the museum and publishing world.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
ART 102
herbergeradvising@asu.edu
480-965-3468

## Art (Art Studies), BA (FAARTSTDBA)

Campus: TEMPE
Program Description: The art studies curriculum offers students a broad educational foundation in the arts and general studies. The B.A. in art with a concentration in art studies is an interdisciplinary program featuring course work in art history, studio art, performing arts and a range of arts-related courses throughout the university. This concentration offers students a great deal of flexibility in planning course work. The scope of offerings in art and elsewhere on campus is unparalleled at smaller institutions. An art studies student can assemble an art-related curriculum focused on individual student needs, in consultation with a faculty advisor.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Admission Requirements: Students meeting the university requirements for admission may matriculate in the Herberger Institute for Design and the Arts. Separate admission procedures and approvals are required for some programs within the college. Students must contact specific departments or schools for details.
Freshmen may apply directly to the Art Studies program; there is no portfolio review for this major.
Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- the existence of parallel and equal courses in the college's curriculum, and
- departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates work in arts-related fields such as:

- Arts administration.
- Galleries.
- Service-related art fields.

Career opportunities are also available with employers who seek graduates with a well-rounded humanities education.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
ART 102
herbergeradvising@asu.edu
480-965-3468

## Art (Ceramics), BFA (FAARTCBFA)

Campus: TEMPE

Program Description: The B.F.A. ceramics program provides a stimulating and challenging environment for artistic and intellectual growth. With the realization that discipline, familiarity with historical precedents, and freedom go hand in hand with creative activities, the area strives to strike a balance between the acquisition of traditional skills and the promotion of independence and innovation. Responsibility is placed on the individual student to find personally meaningful content and an effective means to express that content within the ceramic arts. The ceramics program features a complete and varied line of kilns, wheels and other equipment. World-renowned faculty ensure that graduates of the program learn the techniques and concepts that will enable their work to take any direction they wish. A strong guest artist schedule enhances the program and the Ceramics Research Center at the ASU Art Museum, with its collection of more than 3,000 pieces, provides unparalleled opportunities to study and research ceramics.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Admission Requirements: All art students will be admitted to ASU into the Bachelor of Arts (art studies) program. They must complete a series of requirements including foundational course work and successfully passing a portfolio review to be eligible for study in one of the school's Bachelor of Fine Arts degree programs, which include upper-division course work in the studio. There is no portfolio review process at the time of admission to ASU for freshmen.
Typically, students in their second year who are interested in studio art and art education will submit a portfolio for review after completing the core requirements and during completion of the last of the 12 hours of 200 -level art requirements. Students interested in art history or museum studies will submit a declaration form in the semester in which they complete 30 hours. The student's major will be changed upon successful completion of the portfolio. Students may choose to remain in and complete the Bachelor of Arts (art studies) in which case no portfolio is required.

Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements, apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.
Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to 1) the existence of parallel and equal courses in the college's curriculum, and 2) departmental or school evaluation of studio courses with respect to performance standards.
Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates of the undergraduate and graduate programs work as artists in the field, selling their works through commercial galleries, commissions and to private collectors. Some artists work as designers and consultants to the commercial ceramic industry; others set up their own businesses, producing hand-crafted functional ware, architectural tiles and one-of-a-kind works.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
ART 102
herbergeradvising@asu.edu
480-965-3468

## Art (Drawing), BFA (FAARTDBFA)

Campus: TEMPE
Program Description: The B.F.A. drawing program offers a learning environment for creative, intellectual and technical growth that leads to quality art practice and professionalism. The program encourages a wide spectrum of approaches to contemporary drawing as visual expression, ranging from traditional to innovative. Students work under the guidance of a large full-time faculty of active professionals who are nationally and internationally recognized. Visiting artists of national stature enhance the program with lectures and individual undergraduate critiques.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: All art students will be admitted to ASU into the Bachelor of Arts (art studies) program. They must complete a series of requirements including foundational course work and successfully passing a portfolio review to be eligible for study in one of the school's Bachelor of Fine Arts degree programs, which include upper-division course work in the studio. There is no portfolio review process at the time of admission to ASU for freshmen.
Typically, students in their second year who are interested in studio art and art education will submit a portfolio for review after completing the core requirements and during completion of the last of the 12 hours of 200 -level art requirements. Students interested in art history or museum studies will submit a declaration form in the semester in which they complete 30 hours. The student's major will be changed upon successful completion of the portfolio. Students may choose to remain in and complete the Bachelor of Arts (art studies) in which case no portfolio is required.
Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements, apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.
Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to 1) the existence of parallel and equal courses in the college's curriculum, and 2) departmental or school evaluation of studio courses with respect to performance standards.
Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates complete the program with drawing skills that enable them to apply for positions that require knowledge in drawing or two-dimensional conceptual skills. Further education, either formal or informal, is usually necessary to refine their skills in a very competitive marketplace. Many graduates continue their education in an M.F.A. graduate program, which allows them to develop their talent further and to teach. Some take jobs in related fields, such as galleries and museums, allowing them to continue producing their own creative work.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
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ART 102
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## Art (Fibers), BFA (FAARTFBFA)

Campus: TEMPE
Program Description: The B.F.A. fibers program cultivates an environment that stimulates both creative and intellectual growth. As they pursue their degree, students are encouraged to discover their distinctive expression informed by knowledge and skills related to surface design, woven structures and 3-D structures. Course work covers processes from basic carding, spinning, dyeing and felting to the use of the loom. Throughout, students are challenged to utilize and interpret textile traditions while considering innovative and interdisciplinary approaches to contemporary art.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Admission Requirements: All art students will be admitted to ASU into the Bachelor of Arts (art studies) program. They must complete a series of requirements including foundational course work and successfully passing a portfolio review to be eligible for study in one of the school's Bachelor of Fine Arts degree programs, which include upper-division course work in the studio. There is no portfolio review process at the time of admission to ASU for freshmen.
Typically, students in their second year who are interested in studio art and art education will submit a portfolio for review after completing the core requirements and during completion of the last of the 12 hours of 200 -level art requirements. Students interested in art history or museum studies will submit a declaration form in the semester in which they complete 30 hours. The student's major will be changed upon successful completion of the portfolio. Students may choose to remain in and complete the Bachelor of Arts (art studies) in which case no portfolio is required.
Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements, apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.
Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to 1) the existence of parallel and equal courses in the college's curriculum, and 2) departmental or school evaluation of studio courses with respect to performance standards.
Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates with a B.F.A. are prepared to establish their own studios and begin making art or design fabrics for use as interior fabrics or as one-of-a-kind garments. Students are also prepared to begin a graduate program. Some undergraduates have gone to New York City to work in the field of designing textiles. Others prefer to focus on their own art for exhibition. Graduates also set up their own studios and design wearable or fabrics for interior use, while others make their living by doing commissioned work for interior spaces.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
ART 102

## Art (Intermedia), BFA (FAARTIBFA)

Campus: TEMPE
Program Description: The B.F.A. intermedia program is a conceptually driven program with an interdisciplinary approach to artmaking. Students work with experimental studio practices, performance and digital media to explore new avenues for selfexpression, collaborative practice and community action. The program covers a wide range of conceptual and media orientations reflecting the professional practices of a growing team of faculty members. Currently, emphases in performance, installation, mixed media, digital video, digital sculpture, animation and Web art are offered. Interaction and collaboration across other areas in the School of Art, including sculpture and photography, are encouraged and supported.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: All art students will be admitted to ASU into the Bachelor of Arts (art studies) program. They must complete a series of requirements including foundational course work and successfully passing a portfolio review to be eligible for study in one of the school's Bachelor of Fine Arts degree programs, which include upper-division course work in the studio. There is no portfolio review process at the time of admission to ASU for freshmen.
Typically, students in their second year who are interested in studio art and art education will submit a portfolio for review after completing the core requirements and during completion of the last of the 12 hours of 200 -level art requirements. Students interested in art history or museum studies will submit a declaration form in the semester in which they complete 30 hours. The student's major will be changed upon successful completion of the portfolio. Students may choose to remain in and complete the Bachelor of Arts (art studies) in which case no portfolio is required.
Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements, apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.
Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to 1) the existence of parallel and equal courses in the college's curriculum, and 2) departmental or school evaluation of studio courses with respect to performance standards.
Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Career opportunities depend on the emphasis selected. Possibilities include:

- Computer graphics and animation.
- Independent artist.
- Media consultant.
- Museum or gallery installation.
- Positions in the music/entertainment industry.
- Set designer.
- Teacher.
- Videography.


## Contact Information:

Design and the Arts, Herberger Institute for
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ART 102
herbergeradvising@asu.edu
480-965-3468
Art (Metals), BFA (FAARTMBFA)
Campus: TEMPE

Program Description: The B.F.A. metals program offers a wide range of traditional and non-traditional approaches to:

- Attention to detail.
- Creativity.
- Critical thinking.
- Emphasizing craft skills.
- Metalworking.

A well-equipped studio with a wide variety of metal-smithing tools is offered. Students explore the close relationship with the School of Art's sculpture and foundry programs, learn important entrepreneurial skills and receive a strong foundation in technical vocabulary and methods for working with metal while being encouraged to experiment with alternative materials and techniques. Students have the opportunity to gain knowledge and skills through additional educational opportunities that include:

- Conferences and symposia.
- Internship possibilities.
- Lectures.
- Visiting artists.
- Visits to artist studios, museums and exhibitions.
- Workshops.

ASU is located in proximity to numerous galleries and museums as well as local organizations such as:

- The Arizona Artist-Blacksmith Association.
- The Arizona Designer Craftsmen.
- Metalink.

Additional Program Fee: N.
Second Language Requirement: $N$.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: All art students will be admitted to ASU into the Bachelor of Arts (art studies) program. They must complete a series of requirements including foundational course work and successfully passing a portfolio review to be eligible for study in one of the school's Bachelor of Fine Arts degree programs, which include upper-division course work in the studio. There is no portfolio review process at the time of admission to ASU for freshmen.
Typically, students in their second year who are interested in studio art and art education will submit a portfolio for review after completing the core requirements and during completion of the last of the 12 hours of 200 -level art requirements. Students interested in art history or museum studies will submit a declaration form in the semester in which they complete 30 hours. The student's major will be changed upon successful completion of the portfolio. Students may choose to remain in and complete the Bachelor of Arts (art studies) in which case no portfolio is required.
Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements, apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.
Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to 1) the existence of parallel and equal courses in the college's curriculum, and 2) departmental or school evaluation of studio courses with respect to performance standards.
Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates find opportunities in jewelry firms or work in independent production as one-of-a-kind jewelers in their own businesses. Many students further their opportunities by going on to complete the M.F.A.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu/

## Art (Museum Studies), BA (FAARTMSBA)

## Campus: TEMPE

Program Description: Museum studies students explore:

- Art galleries.
- Art history.
- Art museums.
- Visual arts organizations.

The B.A. in art with a concentration in museum studies undergraduate program at ASU is one of the most rigorous in the U.S. The program develops students knowledgeable in:

- Art history.
- Critical writing skills.
- Foreign languages.
- Museums, galleries and visual arts organizations.

The curriculum includes art history courses taught by faculty with diverse specialties. Students must take courses in:

- Art history.
- Galleries and museums.
- Research.
- Small business.

Students must also demonstrate an ability to read at least one foreign language.
Additional Program Fee: $N$.
Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: Students meeting the university requirements for admission may matriculate in the Herberger Institute for Design and the Arts. Separate admission procedures and approvals are required for some programs within the college. Students must contact specific departments or schools for details.
Freshmen students applying to the Herberger Institute School of Art enter ASU as art exploratory majors in the School of Art. There is no portfolio review process at the time of admission to ASU for freshmen.

Typically students in their second year interested in studio art and art education will submit a portfolio for review once they have completed their core requirements and are completing the last of the 12 hours of 200-level art requirements; or if they are interested in art history or museum studies, they will submit a declaration form in the semester in which they complete 30 hours. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- the existence of parallel and equal courses in the college's curriculum, and
- departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 hours of resident credit in the major as approved by the faculty.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Museum studies graduates find employment possibilities in art galleries, art-based organizations and entrylevel positions with art publications and museums. A graduate degree is necessary for professional positions. An M.A. prepares
individuals to teach at community colleges and to gain entry into museums, auction houses and publishing companies. The Ph.D. is necessary for employment as a faculty member at a university or for administrative posts in museums and higher education.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu/
ART 102
herbergeradvising@asu.edu
480-965-3468

## Art (Painting), BFA (FAARTPABFA)

Campus: TEMPE

Program Description: The B.F.A. painting program offers a learning environment for creative, intellectual and technical growth that leads to quality art practice and professionalism. The program encourages a wide spectrum of approaches to contemporary painting as visual expression, ranging from traditional to innovative. Students work under the guidance of a large full-time faculty of active professionals who are nationally and internationally recognized. Visiting artists of national stature enhance the program with lectures and individual undergraduate critiques.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Admission Requirements: All art students will be admitted to ASU into the Bachelor of Arts (art studies) program. They must complete a series of requirements including foundational course work and successfully passing a portfolio review to be eligible for study in one of the school's Bachelor of Fine Arts degree programs, which include upper-division course work in the studio. There is no portfolio review process at the time of admission to ASU for freshmen.
Typically, students in their second year who are interested in studio art and art education will submit a portfolio for review after completing the core requirements and during completion of the last of the 12 hours of 200-level art requirements. Students interested in art history or museum studies will submit a declaration form in the semester in which they complete 30 hours. The student's major will be changed upon successful completion of the portfolio. Students may choose to remain in and complete the Bachelor of Arts (art studies) in which case no portfolio is required.
Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements, apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.
Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to 1) the existence of parallel and equal courses in the college's curriculum, and 2) departmental or school evaluation of studio courses with respect to performance standards.
Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates complete the program with the painting skills that enable them to apply for positions that require knowledge in painting or two-dimensional conceptual skills. Further education, either formal or informal, is usually necessary to refine their skills in a very competitive marketplace. Many graduates continue their education in an M.F.A. graduate program, which allows them to develop their talent further and to teach. Some take jobs in related fields, such as galleries and museums, allowing them to continue their own creative work.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu/
ART 102
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480-965-3468

## Art (Photography), BFA (FAARTPHBFA)

Campus: TEMPE
Program Description: The B.F.A. photography program offers students a broad-based educational experience centering around light sensitive systems. The photography faculty at ASU is significant in size and diverse both in background and creative practice, making possible a wide range of options for students. Students work in 19th century processes, a state of the art digital lab, traditional black and white darkrooms and in collaboration with printmakers and intermedia artists. The program includes course work in criticism and theory as well as gallery and museum practice. Northlight Gallery grants students the opportunity to engage with photographic artists from around the world, as well as providing experience with collections and exhibition opportunities.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: All art students will be admitted to ASU into the Bachelor of Arts (art studies) program. They must complete a series of requirements including foundational course work and successfully passing a portfolio review to be eligible for study in one of the school's Bachelor of Fine Arts degree programs, which include upper-division course work in the studio. There is no portfolio review process at the time of admission to ASU for freshmen.
Typically, students in their second year who are interested in studio art and art education will submit a portfolio for review after completing the core requirements and during completion of the last of the 12 hours of 200 -level art requirements. Students interested in art history or museum studies will submit a declaration form in the semester in which they complete 30 hours. The student's major will be changed upon successful completion of the portfolio. Students may choose to remain in and complete the Bachelor of Arts (art studies) in which case no portfolio is required.
Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements, apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.
Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to 1) the existence of parallel and equal courses in the college's curriculum, and 2) departmental or school evaluation of studio courses with respect to performance standards.
Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: A degree in the arts offers students a pathway to a rich and varied choice of careers. The B.F.A. is essential for advanced study leading to the terminal M.F.A. This advanced degree offers opportunities in:

- Curatorial work in galleries, museums and historical collections.
- History or studio areas.
- Nonprofit arts organization management.
- University teaching.


## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
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## Art (Printmaking), BFA (FAARTPMBFA)

## Campus: TEMPE

Program Description: The B.F.A. printmaking program provides a complete studio experience with regular courses in:

- Book arts.
- Intaglio.
- Lithography.
- Monotype.
- Other graphic applications.
- Papermaking.
- Relief.
- Screen-print.

Accomplished faculty teach in spacious, well-equipped studios, offering a complete range of print media. While individual students are encouraged to pursue a personal direction, the faculty encourages students to become well-rounded printmakers; experiencing and understanding many media and processes including experimentation and interdisciplinary approaches to making art. No style, technique or aesthetic approach is stressed over another, so that the individual quality of each student's work is the essential measure of achievement. Collaboration is encouraged and students often work with other areas in the School of Art, particularly photography and intermedia.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Admission Requirements: All art students will be admitted to ASU into the Bachelor of Arts (art studies) program. They must complete a series of requirements including foundational course work and successfully passing a portfolio review to be eligible for study in one of the school's Bachelor of Fine Arts degree programs, which include upper-division course work in the studio. There is no portfolio review process at the time of admission to ASU for freshmen.
Typically, students in their second year who are interested in studio art and art education will submit a portfolio for review after completing the core requirements and during completion of the last of the 12 hours of 200 -level art requirements. Students interested in art history or museum studies will submit a declaration form in the semester in which they complete 30 hours. The student's major will be changed upon successful completion of the portfolio. Students may choose to remain in and complete the Bachelor of Arts (art studies) in which case no portfolio is required.
Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements, apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.
Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to 1) the existence of parallel and equal courses in the college's curriculum, and 2) departmental or school evaluation of studio courses with respect to performance standards.
Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Trained printmakers are working artists, practicing the expression of a personal understanding of their place in the world. They may find employment as artists or printmakers in schools of all levels teaching the execution and appreciation of visual art. They also work in fine art print studios, executing original prints for other artists. Printmaking skills such as screen-printing or photomechanical techniques, acquired for the production of art, also have commercial, nonart applications that may afford skilled employment. Artists with printmaking skills may also work with graphic designs, illustrations and signage or may work in museums, conservation, publishing, galleries and in other art-related activities. Additionally, their art may sell successfully in the open marketplace.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu/
ART 102
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480-965-3468

## Art (Sculpture), BFA (FAARTSBFA)

Campus: TEMPE

Program Description: The B.F.A. sculpture program recognizes the broad, interdisciplinary nature of sculpture today. A wide range of media now fall within an expanded definition of sculpture. Course work includes:

- Architectural sculpture.
- Foundry.
- Interactive and kinetic sculpture.
- More traditional forms of 3-D expression, including metal and wood.
- Neon.
- Video installation.

While classes run the gamut of the contemporary sculpture environment, there also is an emphasis on helping students put today's creations in the context of both the history of sculpture and the larger field of contemporary art. Critical inquiry is augmented by courses in the art history program. Visiting artists, curators and critics connect students to the contemporary context.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Admission Requirements: All art students will be admitted to ASU into the Bachelor of Arts (art studies) program. They must complete a series of requirements including foundational course work and successfully passing a portfolio review to be eligible for study in one of the school's Bachelor of Fine Arts degree programs, which include upper-division course work in the studio. There is no portfolio review process at the time of admission to ASU for freshmen.
Typically, students in their second year who are interested in studio art and art education will submit a portfolio for review after completing the core requirements and during completion of the last of the 12 hours of 200 -level art requirements. Students interested in art history or museum studies will submit a declaration form in the semester in which they complete 30 hours. The student's major will be changed upon successful completion of the portfolio. Students may choose to remain in and complete the Bachelor of Arts (art studies) in which case no portfolio is required.
Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements, apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.
Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to 1) the existence of parallel and equal courses in the college's curriculum, and 2) departmental or school evaluation of studio courses with respect to performance standards.
Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates are prepared to embark on a lifetime exploration of the many aspects of 3-D art. Positions are available in teaching, the fabrication and design of exhibitions, set design, the motion picture industry, welding and 3-D design. Academic posts and positions with museums generally require advanced degrees. Many students also prefer to establish their own studios after graduation.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Art
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## Arts (BA in the Arts), BA (FAATSBA)

## Campus: TEMPE

Program Description: The B.A. in the arts is a broad-based liberal arts degree program designed for students who are passionate about the arts but wish to explore alternatives to the institute's discipline-specific degree programs. Students will gain an increased understanding of the theoretical, historical and cultural forces that shape the arts through an open-ended path for exploration and development of a range of skills that will be valuable for advanced study in multiple disciplines.
The major includes a common core for all students, and students choose a focus from:

- An individualized focus designed by the student and subject to approval by the institute's standards committee and the dean's office.
- Arts administration.
- Digital culture.
- Historical and theoretical studies in the arts.

Applicants interested in pursuing the focus area in digital culture, which emphasizes the ways in which our digitally-mediated environments are changing our experience and evolving our culture, must have a minimum high school G.P.A. of 3.00 and an 1100 SAT or 24 ACT standardized test score. This emphasis also requires MAT 210.

Additional Program Fee: $N$.
Second Language Requirement: $Y$. Students pursuing the historical and theoretical studies focus area must demonstrate foreign language proficiency. Remaining focus areas do not have a second language requirement.
First Required Math Course: MAT 142 College Mathematics. Students pursuing the digital culture in the arts focus area must complete MAT 210 Brief Calculus (instead of MAT 142).

Career Opportunities: As the population in the state of Arizona grows, numerous arts organizations are developing to provide cultural and artistic experiences for our residents. These organizations will need and demand individuals with the necessary critical thinking skills who understand the impact the arts have on society and who will be passionate employees committed to the arts. This degree will provide the skill set necessary for careers as:

- Arts administrators.
- Arts critics.
- Media arts authors and publishers.
- Media arts educators.
- Media arts system developers.
- Museum curators and directors.
- Public art specialists.


## Contact Information:

Design and the Arts, Herberger Institute for
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http://herbergerinstitute.asu.edu/degrees/ba_arts/
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herbergeradvising@asu.edu
480-965-4495

## Dance, BFA (FADANBFA)

Campus: TEMPE
Program Description: The School of Dance provides a dynamic and culturally diverse learning environment where students develop as creative artists, scholars and educators. The B.F.A. in dance provides an interdisciplinary curriculum promoting innovative collaborations and a holistic approach to acquiring skills for successful career transitions. Creativity and research, the core program values, are embedded in a broad range of academic experiences that emphasize:

- Artistic process.
- Leadership.
- Movement and creative practices.
- Pedagogy.

Studies in dance cultures, music, digital media, dance history, philosophy, criticism, movement science, somatics, and stage and screen production enhance the rich educational setting.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Admission Requirements: Students are admitted as dance interview majors and must successfully complete an interview and audition before enrolling in courses. Because entrance into the School of Dance is selective, you also will be asked to indicate your second choice major. If you pass your interview, the School of Dance will change your major to dance. In the event that you are admitted to ASU, but not selected for the School of Dance, you will be placed in your second major choice indicated at the time of application.
Interview days take place in November and February of each year. To ensure a smooth curricular progression, we strongly encourage all prospective dance students, including transfer students, to participate in the interview day during the semester prior to their intended date of enrollment. More information on the interview process and deadlines can be found at http://dance.asu.edu/students/undergrad/prospective/applying.php.
The deadline for applying to ASU for admission to the dance program for fall 2011 was February 18, 2011. Applications are no longer being accepted for fall 2011.
The deadline for applying to ASU for admission to the dance program for spring 2012 is November 4, 2011.
The deadline for applying to ASU for admission to the dance program for fall 2012 is January 27, 2012.
Students must select a different major when applying to ASU after these deadlines. Students may participate in the interview day held during their first semester at ASU. The School of Dance will change their major to dance if they pass the interview.
Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- The existence of parallel and equal courses in the college's curriculum.
- Departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 hours in resident credit at ASU. Transfer students enrolled in the institute must complete a minimum of 15 hours of resident credit in the major as approved by the faculty.

Career Opportunities: A comprehensive academic foundation prepares dance professionals for the 21st century by developing the expertise and broad experience to enable them to initiate artistic projects, perform and choreograph. Other graduates:

- Conduct research.
- Direct or manage a performing arts company, studio or dance-related organization.
- Facilitate community partnerships.
- Produce dance media for performance or instruction.
- Teach and design curriculum.
- Work in technical theatre and dance production.
- Write scholarly publications.


## Contact Information:

Design and the Arts, Herberger Institute for
School of Dance T
http://dance.asu.edu/
PEBE 107A
herbergeradvising@asu.edu
480-965-5029

## Dance (Dance Education), BFA (FADANEBFA)

Campus: TEMPE
Program Description: The B.F.A. in dance education prepares students for certification to teach dance in K-12 schools in the state of Arizona. Students in this degree program are required to complete additional state certification requirements. The School of Dance provides a dynamic and culturally diverse learning environment where students develop as creative artists, scholars and educators. Studies in dance cultures, music, digital media, dance history, philosophy and criticism, movement science, somatics, and stage and screen production enhance the rich educational setting. Creativity and research, the core program values, are embedded in a broad range of academic experiences emphasizing movement and creative practices, artistic process, leadership and pedagogy.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: Students are admitted as dance interview majors and must successfully complete an interview and audition before enrolling in courses. Because entrance into the School of Dance is selective, you also will be asked to indicate your
second choice major. If you pass your interview, the School of Dance will change your major to dance. In the event that you are admitted to ASU, but not selected for the School of Dance, you will be placed in your second major choice indicated at the time of application.
Interview days take place in November and February of each year. To ensure a smooth curricular progression, we strongly encourage all prospective dance students, including transfer students, to participate in the interview day during the semester prior to their intended date of enrollment. More information on the interview process and deadlines can be found at http://dance.asu.edu/students/undergrad/prospective/applying.php.
The deadline for applying to ASU for admission to the dance program for fall 2011 was February 18, 2011. Applications are no longer being accepted for fall 2011.
The deadline for applying to ASU for admission to the dance program for spring 2012 is November 4, 2011.
The deadline for applying to ASU for admission to the dance program for fall 2012 is January 27, 2012.
Students must select a different major when applying to ASU after these deadlines. Students may participate in the interview day held during their first semester at ASU. The School of Dance will change their major to dance if they pass the interview. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- The existence of parallel and equal courses in the college's curriculum.
- Departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 hours in resident credit at ASU. Transfer students enrolled in the institute must complete a minimum of 15 hours of resident credit in the major as approved by the faculty.

Career Opportunities: The concentration in dance education lays the foundation for a career in teaching in public and private settings. Students earn a state of Arizona teaching certification while pursuing the dance education degree and can expect to find employment in one of many thriving middle school and high school dance programs throughout the state, or in more informal community settings.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Dance T
http://dance.asu.edu/
PEBE 107A
herbergeradvising@asu.edu
480-965-5029

## Design Studies, BA (ARDSNBA)

Campus: TEMPE

Program Description: The Bachelor of Arts in design studies is a four-year, non-studio program of study in design that focuses on the design disciplines offered in the ASU Herberger Institute:

- Architectural studies.
- Graphic design.
- Industrial design.
- Interior design.
- Landscape architecture.

It is a highly flexible program of study, much like a liberal arts degree, where students select design and design-related courses offered in the institute and throughout the university. Students acquire a breadth of design knowledge via courses taken from three categories:

- Communication for design.
- Design history.
- General design.

It provides a design education, both general and specific, to students who seek opportunities in the broader design sector or in graduate education.
Students may undertake the B.A. in design studies with a focus area in digital culture, which emphasizes the ways in which our digitally-mediated environments are changing our experience and evolving our culture, or in one of two specific concentrations, 1)
design studies, which allows students to discover the myriad possibilities of design as a subject area as well as the flexibility that it provides for further exploration, or 2) design management, which offers a selection of courses in management and human communication that complement design.
Applicants pursuing the digital culture emphasis must have a minimum high school GPA of 3.00 and an 1100 SAT or 24 ACT standardized test score. This emphasis also requires MAT 210.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: Although a specific career path is not the principal intention of the B.A. in design studies, recent graduates of the program have become involved in sales and marketing in the design sector, or have gone on to graduate studies in architecture and planning. Other possible career paths include journalism and education.

## Contact Information:

Design and the Arts, Herberger Institute for
The Design School
http://herbergerinstitute.asu.edu/degrees/ba_design/
CDS 101
herbergeradvising@asu.edu
480-965-4495

## Design Studies (Design Management), BA (ARDSNMBA)

Campus: TEMPE
Program Description: The Bachelor of Arts in design studies is a four-year, non-studio program of study in design that focuses on the design disciplines offered in the ASU Herberger Institute:

- Architectural studies.
- Graphic design.
- Industrial design.
- Interior design.
- Landscape architecture.

It is a highly flexible program of study, much like a liberal arts degree, where students select design and design-related courses offered in the institute and throughout the university. Students acquire a breadth of design knowledge via courses taken from three categories:

- Communication for design.
- Design history.
- General design.

It provides a design education, both general and specific, to students who seek opportunities in the broader design sector or in graduate education.
Students may undertake the B.A. in design studies with a focus area in digital culture, which emphasizes the ways in which our digitally-mediated environments are changing our experience and evolving our culture, or in one of two specific concentrations, 1) design studies, which allows students to discover the myriad possibilities of design as a subject area as well as the flexibility that it provides for further exploration, or 2) design management, which offers a selection of courses in management and human communication that complement design.
Applicants pursuing the digital culture emphasis must have a minimum high school GPA of 3.00 and an 1100 SAT or 24 ACT standardized test score. This emphasis also requires MAT 210.

Additional Program Fee: N.
Second Language Requirement: $N$.
First Required Math Course: MAT 142 College Mathematics.

Career Opportunities: Although a specific career path is not the principal intention of the B.A. in design studies, recent graduates of the program have become involved in sales and marketing in the design sector, or have gone on to graduate studies in architecture and planning. Other possible career paths include journalism and education.

## Contact Information:

Design and the Arts, Herberger Institute for
The Design School
http://herbergerinstitute.asu.edu/degrees/ba_design/
CDS 101
herbergeradvising@asu.edu
480-965-4495

## Film (Film \& Media Production), BA (FAFLMBA)

Campus: TEMPE
Program Description: The School of Theatre and Film offers a B.A. in film with a concentration in film and media production. The concentration provides students with a comprehensive practical knowledge of production, awareness of the impact of media and entertainment on the audience, and an understanding of the role of the artist in society. The program teaches students to thoughtfully consider not only how to look through a lens, but also why they should, through a unique emphasis in ethical decisionmaking in both content creation and business practices. Students in the film and media production concentration have access to digital cameras, lighting and sound equipment in a teaching studio. Post-production facilities include multiple computer editing stations.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: The film and media production concentration provides students with the knowledge and experience to prepare them to enter careers in media and entertainment as:

- Cinematographers.
- Directors.
- Editors.
- Producers.
- Screenwriters.

The B.A. program is an excellent broad-based foundation for work in the profession or to prepare the student for further training at graduate schools or conservatories.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Theatre and Film
http://theatrefilm.asu.edu
GHALL 232
herbergeradvising@asu.edu
480-965-5337

## Film (Filmmaking Practices), BA (FAFPRBA)

Campus: TEMPE
Program Description: A B.A. in film with a concentration in filmmaking practices provides students with a comprehensive film education within the context of the liberal arts while offering specialty course work in the following areas: performance, design and production, new work development, and film and media production.
Students pursuing the filmmaking practices concentration of the B.A. in film receive grounding in production practice, independent film producing, entertainment ethics and an understanding of the role of the artist in society. Students are encouraged to participate in the production-oriented environment of the Herberger Institute for Design and the Arts. The curriculum's course work in ethics in entertainment and dramatic analysis are two unique components of the program.

## Additional Program Fee: N.

## Second Language Requirement: N.

First Required Math Course: MAT 142 College Mathematics.

Admission Requirements: Students interested in pursuing the highly-selective, studio-based film and media production concentration must achieve a 3.00 GPA or higher in the film core and a cumulative ASU GPA of 2.50 to interview for the concentration. They must also interview and submit a portfolio for review in the semester in which they are completing the core.

Career Opportunities: The filmmaking practices concentration provides students with the knowledge and experience to prepare them to enter entry-level positions in media and entertainment production, producing and film management or to enter advanced graduate-level education.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Theatre and Film
http://theatrefilm.asu.edu
GHALL 232
herbergeradvising@asu.edu
480-965-5337

## Graphic Design, BSD (ARGRABSD)

## Campus: TEMPE

Program Description: Graphic designers are responsible for designing how information is communicated. Forms of communication include print, video, film and electronic (Web). The faculty in the School of Architecture and Landscape Architecture offers the B.S.D. in graphic design. Graphic designers are concerned with:

- Appearance.
- Choosing the appropriate mechanism for distinctness.
- Clarity of information.
- How communication is transferred and received.

This program places an emphasis on strategic communication, developed through a design process that includes research, analysis, conceptualization, planning and realization. The process leads to innovative visual communication design solutions for contemporary design problems that are local to global in scope.
This is an eight-semester program requiring sequential completion of studio course work (or approved equivalent) at any point of entry.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Career Opportunities: Based on a very diversified portfolio upon graduation, students opting for the graphic design profession gain employment in:

- Advertising.
- Brand and corporate identity.
- Broadcast (TV graphics).
- Interaction and interface design.
- Museum/exhibitions.
- Publication.

Specific examples of graphic designers' work include:

- Annual reports.
- Books.
- Environmental graphics.
- Multimedia presentations.
- Publications.
- Web pages.

Students may also pursue graduate studies leading to careers in design education and other fields of professional endeavor in design.

## Contact Information:

Design and the Arts, Herberger Institute for
The Design School
http://herbergerinstitute.asu.edu/degrees/design.php
CDN 162
herbergeradvising@asu.edu
480-965-8947

## Industrial Design, BSD (ARINDBSD)

Campus: TEMPE

Program Description: Industrial designers are responsible for the design of products and systems that people use in their everyday lives. The industrial design program at ASU focuses on a new model of interdisciplinary product development called integrated innovation. The primary goal of integrated innovation is to produce design solutions that:

- Meet user needs in unexpected ways.
- Create value in the marketplace.
- Improve society and the environment.

This is an eight-semester program requiring sequential completion of studio course work (or approved equivalent) at any point of entry.

Additional Program Fee: N.
Second Language Requirement: $N$.
First Required Math Course: MAT 170 Precalculus.

## Admission Requirements:

Career Opportunities: Graduates work for corporations that have their own industrial design departments, in such industries as:

- Computer hardware/software.
- Consumer goods.
- Furniture.
- Medical device manufacturing.
- Toys.
- Transportation.

Opportunities also exist with consulting firms that design for a variety of different clients. A third option includes entrepreneurship, as some graduates have established their own design and manufacturing ventures.

## Contact Information:

Design and the Arts, Herberger Institute for
The Design School
http://herbergerinstitute.asu.edu/degrees/design.php
CDN 162
herbergeradvising@asu.edu
480-965-8947
Interior Design, BSD (ARINTBSD)
Campus: TEMPE

Program Description: Course work in the B.S.D. in interior design examines the context in which individuals and groups live and work. Interior designers create environments within buildings that meet the physical and psychological needs of individuals and institutions providing a useful, rich and rewarding context for their lives. Interior design involves the design of space, equipment and furniture. It requires substantial technical and organizational understanding, as well as sensibility to color, shape and form. This is an eight-semester program requiring sequential completion of studio course work (or approved equivalent) at any point of entry.

## Additional Program Fee: N.

Second Language Requirement: $N$.
First Required Math Course: MAT 170 Precalculus.

Career Opportunities: Graduates find employment opportunities with interior design firms or architecture firms specializing in interior design. The scope of work undertaken by interior designers is expanding. Career opportunities include historic restoration, and working for large corporations or governmental agencies within their interior design and space-management offices.

## Contact Information:

Design and the Arts, Herberger Institute for
The Design School
http://herbergerinstitute.asu.edu/degrees/design.php
CDN 162
herbergeradvising@asu.edu
480-965-8947

## Landscape Architecture, BSLA (ARPLABSLA) <br> Campus: TEMPE

Program Description: Landscape architects are involved in the design, planning, analysis and management of the natural and built environment. Landscape architects develop expertise in both the art of design and the environmental sciences. While landscape architects may design a residential garden, an urban park and playground, a residential development or a national park, they all share a deep commitment to stewardship of the land and the highest standard of planning and design that directly enhances the quality of people's lives. Landscape architecture students learn about:

- Art.
- Construction techniques.
- Design.
- History.
- Natural science.
- Planning.
- Social studies.

This is an eight-semester program requiring sequential completion of studio course work (or its approved equivalent) at any point of entry.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.

## Admission Requirements:

Career Opportunities: Graduates in landscape architecture are able to pursue career opportunities in private landscape architecture, academic organizations and government agencies such as:

- The Bureau of Land Management.
- The Department of Transportation.
- The National Park Service.
- The Soil Conservation Service.
- The U.S. Corps of Engineers.
- The U.S. Forest Service.

Some landscape architects elect to pursue graduate degrees to develop specialty skills and to enhance their opportunities for career advancement.
U.S. News and World Report named landscape architecture among the best career choices in 2010.

## Contact Information:

Design and the Arts, Herberger Institute for
The Design School
http://herbergerinstitute.asu.edu/degrees/sala.php
CDN 162
herbergeradvising@asu.edu
480-965-3536

## Music, BA (FAMUSBA)

Campus: TEMPE
Program Description: The B.A. in music provides students with a broad-based degree applicable to a variety of professional settings. Students develop an understanding of human culture through:

- Analysis of ideas.
- Appreciation of art forms.
- Beauty and symmetry.
- Knowledge of theories.
- Perception of differences.
- Principles of form, subsistancy, argument and philosophy.

This degree may be used as a first step toward a master's or doctoral degree or combined with other degree programs.

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Additional Program Fee: N.
Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.
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Admission Requirements: Important: An additional application, supplementary materials, and audition are required for entrance to the School of Music. Please go to http://music.asu.edu/admissions/undergrad/ for information on applying to the School of Music. Because entrance into the School of Music is selective, you will be asked to indicate a second choice of major when completing your application to ASU. If you pass your audition, the School of Music will change your major to the appropriate music major. In the event that you are admitted to ASU, but not selected for the School of Music, you will be placed in the second major choice you indicated on your application to ASU. Audition days take place in November (for spring admission), and February/March (for fall admission) of each year. More information on the audition process is available here: http://music.asu.edu/admissions/auditions/. Application Deadlines
Please visit http://music.asu.edu/admissions/deadlines for complete information on School of Music deadlines.
Spring 2012: The deadline for applying to ASU for admission to the B.A. in music is October 1, 2011 for voice applicants, and October 15,2011 for instrumental and keyboard applicants. A prescreening is required for all applicants who wish to audition in voice: http://music.asu.edu/admissions/voice.
Fall 2012: The deadline for applying to ASU for admission to B.A. in music is December 1, 2011 for voice applicants, and January 15, 2012 for instrumental and keyboard applicants. A prescreening is required for all applicants who wish to audition in voice: http://music.asu.edu/admissions/voice.
You must select a different major when applying to ASU after these deadlines. You may apply to the School of Music for the audition day(s) held during your first semester at ASU. The School of Music will change your major to music if you pass your audition. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- The existence of parallel and equal courses in the college's curriculum.
- Departmental or school evaluation of studio and class piano courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU.
Transfer students enrolled in the institute must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Music research, criticism, publishing and concert management are a few of the career opportunities. Many graduates pursue a master's or a doctorate in music or in another professional field.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
MUSIC E167
somadmissions@asu.edu
480-965-3371

## Music Education (Choral-General), BMus (FAMUSCBMUS)

Campus: TEMPE
Program Description: The B.Mus. in music education (choral-general) program is designed for students interested in pursuing careers as teachers of general or choral music in elementary and secondary schools. This program also prepares students for K-12 teaching certification.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: Important: An additional application, supplementary materials, and audition are required for entrance to the School of Music. Please go to http://music.asu.edu/admissions/undergrad/ for information on applying to the School of Music. Because entrance into the School of Music is selective, you will be asked to indicate a second choice of major when completing your application to ASU. If you pass your audition, the School of Music will change your major to the appropriate music major. In the event that you are admitted to ASU, but not selected for the School of Music, you will be placed in the second major choice you indicated on your application to ASU. Audition days take place in November (for spring admission), and February/March (for fall admission) of each year. More information on the audition process is available here: http://music.asu.edu/admissions/auditions/. Application Deadlines
Please visit http://music.asu.edu/admissions/deadlines for complete information on School of Music deadlines.
Spring 2012: The deadline for applying to ASU for admission to the B.Mus. in music education is October 1, 2011 for voice applicants, and October 15, 2011 for instrumental and keyboard applicants. A prescreening is required for all applicants who wish to audition in voice: http://music.asu.edu/admissions/voice.
Fall 2012: The deadline for applying to ASU for admission to B.Mus. in music education is December 1, 2011 for voice applicants, and January 15, 2012 for instrumental and keyboard applicants. A prescreening is required for all applicants who wish to audition in voice: http://music.asu.edu/admissions/voice.
You must select a different major when applying to ASU after these deadlines. You may apply to the School of Music for the audition day(s) held during your first semester at ASU. The School of Music will change your major to music if you pass your audition. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- The existence of parallel and equal courses in the college's curriculum.
- Departmental or school evaluation of studio and class piano courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 hours in resident credit at ASU.
Transfer students enrolled in the institute must complete a minimum of 15 hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates teach in public and private school music programs that offer general music, choir, band, orchestra or some combination of musical activities. Graduates also:

- Perform in community and professional ensembles.
- Teach privately.
- Work in music-related industries.


## Contact Information:

## Music Education (Instrumental), BMus (FAMUSIIBM) <br> Campus: TEMPE

Program Description: The B.Mus. in music education (instrumental) program is designed for students interested in pursuing careers as teachers of instrumental (band, percussion, winds) music in the public schools. The degree program also prepares students for K12 teaching certification.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: Important: An additional application, supplementary materials, and audition are required for entrance to the School of Music. Please go to http://music.asu.edu/admissions/undergrad/ for information on applying to the School of Music. Because entrance into the School of Music is selective, you will be asked to indicate a second choice of major when completing your application to ASU. If you pass your audition, the School of Music will change your major to the appropriate music major. In the event that you are admitted to ASU, but not selected for the School of Music, you will be placed in the second major choice you indicated on your application to ASU. Audition days take place in November (for spring admission), and February/March (for fall admission) of each year. More information on the audition process is available here: http://music.asu.edu/admissions/auditions/. Application Deadlines
Please visit http://music.asu.edu/admissions/deadlines for complete information on School of Music deadlines.
Spring 2012: The deadline for applying to ASU for admission to the B.Mus. in music education is October 1, 2011 for voice applicants, and October 15, 2011 for instrumental and keyboard applicants. A prescreening is required for all applicants who wish to audition in voice: http://music.asu.edu/admissions/voice.
Fall 2012: The deadline for applying to ASU for admission to B.Mus. in music education is December 1, 2011 for voice applicants, and January 15, 2012 for instrumental and keyboard applicants. A prescreening is required for all applicants who wish to audition in voice: http://music.asu.edu/admissions/voice.
You must select a different major when applying to ASU after these deadlines. You may apply to the School of Music for the audition day(s) held during your first semester at ASU. The School of Music will change your major to music if you pass your audition. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- The existence of parallel and equal courses in the college's curriculum.
- Departmental or school evaluation of studio and class piano courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU.
Transfer students enrolled in the institute must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates teach in public and private school music programs that offer general music, choir, band, orchestra, strings or some combination of musical activities. Graduates also:

- Perform in community and professional ensembles.
- Teach privately.
- Work in music-related industries.


## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
MUSIC E167
somadmissions@asu.edu

## Music Education (String), BMus (FAMUSISBM)

Campus: TEMPE
Program Description: The B.Mus. in music education (string) program is designed for students interested in pursuing careers as teachers of string and orchestra music in the public schools. The degree program also prepares students for K-12 teaching certification.

Additional Program Fee: $N$.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: Important: An additional application, supplementary materials, and audition are required for entrance to the School of Music. Please go to http://music.asu.edu/admissions/undergrad/ for information on applying to the School of Music. Because entrance into the School of Music is selective, you will be asked to indicate a second choice of major when completing your application to ASU. If you pass your audition, the School of Music will change your major to the appropriate music major. In the event that you are admitted to ASU, but not selected for the School of Music, you will be placed in the second major choice you indicated on your application to ASU. Audition days take place in November (for spring admission), and February/March (for fall admission) of each year. More information on the audition process is available here: http://music.asu.edu/admissions/auditions/.
Application Deadlines
Please visit http://music.asu.edu/admissions/deadlines for complete information on School of Music deadlines.
Spring 2012: The deadline for applying to ASU for admission to the B.Mus. in music education is October 1, 2011 for voice applicants, and October 15, 2011 for instrumental and keyboard applicants. A prescreening is required for all applicants who wish to audition in voice: http://music.asu.edu/admissions/voice.
Fall 2012: The deadline for applying to ASU for admission to B.Mus. in music education is December 1, 2011 for voice applicants, and January 15, 2012 for instrumental and keyboard applicants. A prescreening is required for all applicants who wish to audition in voice: http://music.asu.edu/admissions/voice.
You must select a different major when applying to ASU after these deadlines. You may apply to the School of Music for the audition day(s) held during your first semester at ASU. The School of Music will change your major to music if you pass your audition. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- The existence of parallel and equal courses in the college's curriculum.
- Departmental or school evaluation of studio and class piano courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU.
Transfer students enrolled in the institute must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates teach in public and private school music programs that offer general music, choir, band, strings, orchestra or some combination of musical activities. Graduates also:

- Perform in community and professional ensembles.
- Teach privately.
- Work in music-related industries.


## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
MUSIC E167
somadmissions@asu.edu
480-965-3371

## Music Therapy, BMus (FAMUSTHBM)

Campus: TEMPE

Program Description: The B.Mus. in music therapy program prepares students for a career in the mental-health/special-education profession. Music therapists use carefully planned music activities to achieve desired changes in client behavior and functioning. Music therapy is a profession in which engagement in active music-making helps a client achieve nonmusical, therapeutic goals. Educating the potential music therapist requires both a wide range of musical skills and the ability to work with people in a therapeutic manner. Music therapy students have many opportunities to develop their clinical skills. Students also study:

- Musical improvisation.
- Popular music styles.
- Songwriting.
- World music.


## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 119 Finite Mathematics.

Admission Requirements: Important: An additional application, supplementary materials, and audition are required for entrance to the School of Music. Please go to http://music.asu.edu/students/prospective/undergrad/apply_SOM.php for information on applying to the School of Music.
Because entrance into the School of Music is selective, you will be asked to indicate a second choice of major when completing your application to ASU. If you pass your audition, the School of Music will change your major to the appropriate music major. In the event that you are admitted to ASU, but not selected for the School of Music, you will be placed in the second major choice you indicated on your application to ASU. Audition days take place in November (for spring admission), and February/March (for fall admission) of each year. More information on the audition process is available here:
http://music.asu.edu/students/prospective/undergrad/apply_Audition.php.
Application Deadlines
Please visit http://music.asu.edu/admissions/deadlines for complete information on School of Music deadlines.
Spring 2012: The deadline for applying to ASU for admission to the B.Mus. in music therapy is October 1, 2011 for voice applicants, and October 15, 2011 for instrumental and keyboard applicants. A prescreening is required for all applicants who wish to audition in voice: http://music.asu.edu/admissions/voice.
Fall 2012: The deadline for applying to ASU for admission to B.Mus. in music therapy is December 1, 2011 for voice applicants, and January 15, 2012 for instrumental and keyboard applicants. A prescreening is required for all applicants who wish to audition in voice: http://music.asu.edu/admissions/voice.
You must select a different major when applying to ASU after these deadlines. You may apply to the School of Music for the audition day(s) held during your first semester at ASU. The School of Music will change your major to music if you pass your audition. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- The existence of parallel and equal courses in the college's curriculum.
- Departmental or school evaluation of studio and class piano courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU.
Transfer students enrolled in the institute must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates are eligible to register as professional music therapists and can sit for the music therapy certification examination given by the Certification Board of the American Music Therapy Association. Positions are available regionally and nationally in hospitals, schools, rehabilitation centers, nursing homes and other health care facilities. Career opportunities also include work in:

- Geriatric care.
- Mental health.
- Physical rehabilitation.
- Special education.

A music therapy career may also provide an opportunity for private practice with flexible hours.

## Contact Information:

Design and the Arts, Herberger Institute for

School of Music
http://music.asu.edu
MUSIC E167
somadmissions@asu.edu
480-965-3371

## Performance (Collaborative Piano), BMus (FAMUSPPBM) <br> Campus: TEMPE

Program Description: The B.Mus. in performance with a concentration in collaborative piano offers private instruction, supervised ensemble work and ample opportunity for extensive collaborative performance experience. The program focuses on core repertoire: the English, German and French song literature and selected works from the instrumental, operatic and oratorio repertoire. Collaboration within the School of Music involves working with all performance areas, including:

- Concerts with large ensembles and choirs.
- Duo recitals with instrumental and voice colleagues.
- Performances of great chamber music literature.
- Work as rehearsal and pit pianists for the Lyric Opera Theater.


## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: Important: An additional application, supplementary materials, and audition are required for entrance to the School of Music. Please go to http://music.asu.edu/admissions/undergrad/ for information on applying to the School of Music. Because entrance into the School of Music is selective, you will be asked to indicate a second choice of major when completing your application to ASU. If you pass your audition, the School of Music will change your major to the appropriate music major. In the event that you are admitted to ASU, but not selected for the School of Music, you will be placed in the second major choice you indicated on your application to ASU. Audition days take place in November (for spring admission), and February/March (for fall admission) of each year. More information on the audition process is available here: http://music.asu.edu/admissions/auditions/. Application Deadlines
Applicants interested in this program should first contact Dr. Andrew Campbell (Andrew.Campbell@asu.edu) before applying. Please visit http://music.asu.edu/admissions/deadlines for complete information on School of Music deadlines.
Spring 2012: The deadline for applying to ASU for admission to the B.Mus. in keyboard performance is October 15, 2011. Fall 2012: The deadline for applying to ASU for admission to B.Mus. in keyboard performance is January 15, 2012.
You must select a different major when applying to ASU after these deadlines. You may apply to the School of Music for the audition day(s) held during your first semester at ASU. The School of Music will change your major to music if you pass your audition. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- The existence of parallel and equal courses in the college's curriculum.
- Departmental or school evaluation of studio and class piano courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU.
Transfer students enrolled in the institute must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: A degree in the arts offers students a pathway to a rich and varied choice of careers. Career opportunities include:

- Collaborative pianist or private studio of piano.
- Collaborative piano.
- Professional performer.

College-level teaching does require a graduate degree.

## Contact Information:

Design and the Arts, Herberger Institute for

School of Music
http://music.asu.edu
MUSIC E167
somadmissions@asu.edu
480-965-3371

## Performance (Guitar), BMus (FAMUSPGBM)

## Campus: TEMPE

Program Description: The B.Mus. program in performance with a concentration in guitar stresses the study of guitar literature and techniques. Goals include enabling students to express themselves musically while emphasizing the skills necessary to pursue a career as a professional musician. The course of study includes extensive performance experiences.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: Important: An additional application, supplementary materials, and audition are required for entrance to the School of Music. Please go to http://music.asu.edu/admissions/undergrad/ for information on applying to the School of Music. Because entrance into the School of Music is selective, you will be asked to indicate a second choice of major when completing your application to ASU. If you pass your audition, the School of Music will change your major to the appropriate music major. In the event that you are admitted to ASU, but not selected for the School of Music, you will be placed in the second major choice you indicated on your application to ASU. Audition days take place in November (for spring admission), and February/March (for fall admission) of each year. More information on the audition process is available here: http://music.asu.edu/admissions/auditions/. Application Deadlines
Please visit http://music.asu.edu/admissions/deadlines for complete information on School of Music deadlines.
Spring 2012: The deadline for applying to ASU for admission to the B.Mus. in guitar performance is October 15, 2011.
Fall 2012: The deadline for applying to ASU for admission to B.Mus. in guitar performance is January 15, 2012.
You must select a different major when applying to ASU after these deadlines. You may apply to the School of Music for the audition day(s) held during your first semester at ASU. The School of Music will change your major to music if you pass your audition. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- The existence of parallel and equal courses in the college's curriculum.
- Departmental or school evaluation of studio and class piano courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU.
Transfer students enrolled in the institute must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Career opportunities for graduates with a B.Mus. in performance with a concentration in guitar include:

- Artist-in-residence interaction as part of school programs or state or community arts councils, for social functions.
- Performing as a concert soloist or in chamber music ensembles.
- Providing music for restaurants, clubs, resorts, churches and art galleries.
- Recording and studio work.
- Teaching privately or as part of a college or university program.


## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
MUSIC E167
somadmissions@asu.edu
480-965-3371

## Performance (Jazz), BMus (FAMUSPJBM)

Campus: TEMPE

Program Description: The jazz concentration, under the B.Mus. in performance, places an emphasis on the improvisational aspects of jazz. The curriculum combines jazz performance, composition and pedagogy in a program that allows the student to express himself or herself musically while emphasizing the skills necessary to pursue a career as a professional musician. The study of jazz performance can be a suitable background for work in:

- Contemporary composition.
- Film scoring, writing and arranging.
- Performance.
- Private instruction.
- Recording studios.
- Teaching jazz pedagogy and other related fields in the music industry.


## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Admission Requirements: Important: An additional application, supplementary materials, and audition are required for entrance to the School of Music. Please go to http://music.asu.edu/admissions/undergrad/ for information on applying to the School of Music. Because entrance into the School of Music is selective, you will be asked to indicate a second choice of major when completing your application to ASU. If you pass your audition, the School of Music will change your major to the appropriate music major. In the event that you are admitted to ASU, but not selected for the School of Music, you will be placed in the second major choice you indicated on your application to ASU. Audition days take place in November (for spring admission), and February/March (for fall admission) of each year. More information on the audition process is available here: http://music.asu.edu/admissions/auditions/. Application Deadlines
Please visit http://music.asu.edu/admissions/deadlines for complete information on School of Music deadlines.
Spring 2012: The deadline for applying to ASU for admission to the B.Mus. in jazz performance is October 15, 2011.
Fall 2012: The deadline for applying to ASU for admission to B.Mus. in jazz performance is January 15, 2012.
You must select a different major when applying to ASU after these deadlines. You may apply to the School of Music for the audition day(s) held during your first semester at ASU. The School of Music will change your major to music if you pass your audition. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- The existence of parallel and equal courses in the college's curriculum.
- Departmental or school evaluation of studio and class piano courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU.
Transfer students enrolled in the institute must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates are prepared to work in various professional capacities, including:

- Accompanist.
- Film scorer.
- Freelance musician.
- Jazz composer/arranger.
- Professional recording artist.
- Studio musician.
- Teacher.


## Contact Information:

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School of Music
http://music.asu.edu
MUSIC E167
somadmissions@asu.edu
480-965-3371

## Performance (Keyboard), BMus (FAMUSPKBM)

Campus: TEMPE

Program Description: The B.Mus. in performance with a concentration in keyboard stresses the study of literature and techniques of the piano, organ or harpsichord. Goals include enabling students to express themselves musically while emphasizing the skills necessary to pursue a career as a professional musician. The course of study includes extensive performance experience.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Admission Requirements: Important: An additional application, supplementary materials, and audition are required for entrance to the School of Music. Please go to http://music.asu.edu/admissions/undergrad/ for information on applying to the School of Music. Because entrance into the School of Music is selective, you will be asked to indicate a second choice of major when completing your application to ASU. If you pass your audition, the School of Music will change your major to the appropriate music major. In the event that you are admitted to ASU, but not selected for the School of Music, you will be placed in the second major choice you indicated on your application to ASU. Audition days take place in November (for spring admission), and February/March (for fall admission) of each year. More information on the audition process is available here: http://music.asu.edu/admissions/auditions/. Application Deadlines
Please visit http://music.asu.edu/admissions/deadlines for complete information on School of Music deadlines.
Spring 2012: The deadline for applying to ASU for admission to the B.Mus. in keyboard performance is October 15, 2011.
Fall 2012: The deadline for applying to ASU for admission to B.Mus. in keyboard performance is January 15, 2012.
You must select a different major when applying to ASU after these deadlines. You may apply to the School of Music for the audition day(s) held during your first semester at ASU. The School of Music will change your major to music if you pass your audition. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- The existence of parallel and equal courses in the college's curriculum.
- Departmental or school evaluation of studio and class piano courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU.
Transfer students enrolled in the institute must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Career opportunities for graduates with a B.Mus. in performance with a concentration in keyboard include:

- Artist-in-residence interaction as part of school programs or state or community arts councils.
- Performing as a concert soloist or in chamber music ensembles.
- Performing for social functions.
- Providing music for restaurants, clubs, resorts, churches and art galleries.
- Recording and studio work.
- Teaching privately or as part of a college or university program.


## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
MUSIC E167
somadmissions@asu.edu
480-965-3371

## Performance (Music Theatre), BMus (FAMUSPMBM)

## Campus: TEMPE

Program Description: The B.Mus in performance with a concentration in music theatre involves workshopping music theatre performance techniques, and performances in various kinds of musical theatre. Students perform in up to five full productions every year, including most varieties of music theatre. The program includes classes in techniques and skills specifically appropriate for
music theatre consequently, music theatre students are not dependent upon classes in music and theatre as separate entities. The general education requirements include courses in dance and acting.

Additional Program Fee: $N$.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Admission Requirements: Important: An additional application, supplementary materials, and audition are required for entrance to the School of Music. Please go to http://music.asu.edu/students/prospective/undergrad/apply_SOM.php for information on applying to the School of Music.
Because entrance into the School of Music is selective, you will be asked to indicate a second choice of major when completing your application to ASU. If you pass your audition, the School of Music will change your major to the appropriate music major. In the event that you are admitted to ASU, but not selected for the School of Music, you will be placed in the second major choice you indicated on your application to ASU. Audition days take place in November (for spring admission), and February/March (for fall admission) of each year. More information on the audition process is available here:
http://music.asu.edu/students/prospective/undergrad/apply_Audition.php.
Application Deadlines
Please visit http://music.asu.edu/admissions/deadlines for complete information on School of Music deadlines.
Spring 2012: The deadline for applying to ASU for admission to the B.Mus. in music theatre performance is October 1,2011 for voice applicants, and October 15, 2011 for instrumental and keyboard applicants. A prescreening is required for all applicants who wish to audition in voice: http://music.asu.edu/admissions/voice.
Fall 2012: The deadline for applying to ASU for admission to B.Mus. in music theatre performance is December 1, 2011 for voice applicants, and January 15, 2012 for instrumental and keyboard applicants. A prescreening is required for all applicants who wish to audition in voice: http://music.asu.edu/admissions/voice.
You must select a different major when applying to ASU after these deadlines. You may apply to the School of Music for the audition day(s) held during your first semester at ASU. The School of Music will change your major to music if you pass your audition. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- The existence of parallel and equal courses in the college's curriculum.
- Departmental or school evaluation of studio and class piano courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU.
Transfer students enrolled in the institute must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: This degree is designed for individuals who plan a career as a performing singer-actor/actress in opera, operetta, musicals and other forms of musical theatre. Graduates find work as conductors, teachers, singers and as actors/actresses. Graduates perform:

- On Broadway.
- In major opera houses.
- In national touring companies.
- At universities, colleges and schools.


## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
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somadmissions@asu.edu
480-965-3371

## Performance (Orchestral Instrument), BMus (FAMUSPOBM)

Campus: TEMPE

Program Description: The B.Mus. in performance (orchestral instrument) stresses the study of specific orchestral instrument literature and techniques. Goals include enabling students to express themselves musically while emphasizing the skills necessary to pursue a career as a professional musician. The course of study includes extensive performance experience.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Admission Requirements: Important: An additional application, supplementary materials, and audition are required for entrance to the School of Music. Please go to http://music.asu.edu/admissions/undergrad/ for information on applying to the School of Music. Because entrance into the School of Music is selective, you will be asked to indicate a second choice of major when completing your application to ASU. If you pass your audition, the School of Music will change your major to the appropriate music major. In the event that you are admitted to ASU, but not selected for the School of Music, you will be placed in the second major choice you indicated on your application to ASU. Audition days take place in November (for spring admission), and February/March (for fall admission) of each year. More information on the audition process is available here: http://music.asu.edu/admissions/auditions/. Application Deadlines
Please visit http://music.asu.edu/admissions/deadlines for complete information on School of Music deadlines.
Spring 2012: The deadline for applying to ASU for admission to the B.Mus. in performance (orchestral instrument) is October 15, 2011.

Fall 2012: The deadline for applying to ASU for admission to B.Mus. in performance (orchestral instrument) is January 15, 2012. You must select a different major when applying to ASU after these deadlines. You may apply to the School of Music for the audition day(s) held during your first semester at ASU. The School of Music will change your major to music if you pass your audition. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- The existence of parallel and equal courses in the college's curriculum.
- Departmental or school evaluation of studio and class piano courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU.
Transfer students enrolled in the institute must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Career opportunities for graduates with a B.Mus. in performance with a concentration in orchestral instruments include:

- Artist-in-residence interaction as part of school programs or state or community arts councils.
- Performing as a concert soloist or in chamber music ensembles.
- Performing for social functions.
- Providing music for restaurants, clubs, resorts, churches and art galleries.
- Recording and studio work.
- Teaching privately or as part of a college or university program.


## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
MUSIC E167
somadmissions@asu.edu
480-965-3371

## Performance (Voice), BMus (FAMUSPVBM)

## Campus: TEMPE

Program Description: The B.Mus. in performance with a concentration in voice stresses the study of specific vocal literature and techniques. Goals include enabling students to express themselves musically while emphasizing the skills necessary to pursue a career as a professional musician. The course of study includes extensive performance experience.

## Additional Program Fee: N.

Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.

Admission Requirements: Important: An additional application, supplementary materials, and audition are required for entrance to the School of Music. Please go to http://music.asu.edu/admissions/undergrad/ for information on applying to the School of Music. Because entrance into the School of Music is selective, you will be asked to indicate a second choice of major when completing your application to ASU. If you pass your audition, the School of Music will change your major to the appropriate music major. In the event that you are admitted to ASU, but not selected for the School of Music, you will be placed in the second major choice you indicated on your application to ASU. Audition days take place in November (for spring admission), and February/March (for fall admission) of each year. More information on the audition process is available here: http://music.asu.edu/admissions/auditions/. Application Deadlines
Please visit http://music.asu.edu/admissions/deadlines for complete information on School of Music deadlines.
Spring 2012: The deadline for applying to ASU for admission to the B.Mus. in voice performance is October 1, 2011. A prescreening is required for all applicants: http://music.asu.edu/admissions/voice.
Fall 2012: The deadline for applying to ASU for admission to B.Mus. in voice performance is December 1, 2011. A prescreening is required for all applicants: http://music.asu.edu/admissions/voice.
You must select a different major when applying to ASU after these deadlines. You may apply to the School of Music for the audition day(s) held during your first semester at ASU. The School of Music will change your major to music if you pass your audition. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- The existence of parallel and equal courses in the college's curriculum.
- Departmental or school evaluation of studio and class piano courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU.
Transfer students enrolled in the institute must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: Career opportunities for graduates with a B.Mus. in performance with a concentration in voice include:

- Artist-in-residence interaction as part of school programs or state or community arts councils.
- Performing as a concert soloist or in chamber music ensembles.
- Performing for social functions.
- Providing music for restaurants, clubs, resorts, churches and art galleries.
- Recording and studio work.
- Teaching privately or as part of a college or university program.


## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
MUSIC E167
somadmissions@asu.edu
480-965-3371

Theatre, BA (FATHEBA)
Campus: TEMPE
Program Description: A B.A. in theatre provides students with a comprehensive theatre education within the context of the liberal arts while offering specialty course work in the following areas:

- Design and production.
- New work development.
- Performance.
- Theatre and performance studies.
- Theatre for youth.
- Extensive and professionally staffed production shops.
- The Galvin Playhouse.
- The Lyceum Theatre.
- The Prism Theatre for student-production work.
- Uniquely equipped rehearsal and instructional spaces.

Additional Program Fee: $N$.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: Students, both freshmen and transfers, are admitted to ASU as theatre exploratory majors. They successfully complete an interview and audition or portfolio review before enrolling as a BA Theatre major. Students may interview before enrolling at ASU or participate in the interview during their first semester of study. Students who enter before interviewing take course work in the first semester to better prepare them for the interview.
Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- the existence of parallel and equal courses in the college's curriculum, and
- departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: The B.A. in theatre program provides an excellent broad-based foundation for work in the arts or entertainment professions or readies students for further training at graduate schools or conservatories. The program's liberal arts emphasis prepares graduates for a variety of occupations in both theatre and non-theatre fields. Opportunities may include work with production companies in theatre, television or film, in schools, themed entertainment or arts entrepreneurship.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Theatre and Film
http://theatrefilm.asu.edu/
GHALL 232
herbergeradvising@asu.edu
480-965-5337

## Theatre (Acting), BA (FATHEABA)

## Campus: TEMPE

Program Description: The B.A. in theatre with a concentration in acting involves comprehensive academic and hands-on theatre study with an emphasis on performance. Student artists and scholars gain a general appreciation of the principal fields of human knowledge while acquiring training in such areas as:

- Film.
- New work development.
- Performance and directing, design and production.
- Theatre and performance studies.
- Theatre for youth.

ASU offers well-equipped theatre facilities including:

- Extensive shops.
- The Galvin Playhouse.
- The Lyceum Theatre.
- The Prism Theatre for student-produced work.
- Uniquely equipped rehearsal and instructional spaces.


## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Admission Requirements: Students are admitted to ASU as theatre exploratory majors. They successfully complete an interview and audition or portfolio review before enrolling as a B.A. Theatre major. Students may interview before enrolling at ASU or participate in the interview during their first semester of study. Students who enter before interviewing take course work in the first semester to better prepare for the interview. After students are admitted to the B.A. Theatre major, they may interview for admission into the acting concentration; these interviews are conducted in the spring semester. Sophomore standing is required for admission to the acting concentration.
Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- the existence of parallel and equal courses in the college's curriculum, and
- departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: The B.A. in theatre program provides an excellent broad-based foundation for work in the profession and readies students for further training at graduate schools or conservatories. The program's liberal arts emphasis prepares graduates for a variety of occupations. The concentration in acting offers students advanced study that can lead to careers in theatre, film or media, ranging from regional/seasonal theatrical production opportunities to work in television and film, as well as careers in education and other related arts disciplines.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Theatre and Film
http://theatrefilm.asu.edu/
GHALL 232
herbergeradvising@asu.edu
480-965-5337

## Theatre (Design \& Production), BA (FADSNPRBA)

## Campus: TEMPE

Program Description: A B.A. in theatre with a concentration in design and production provides students with an opportunity to focus their course work on performance production and thus prepare for both advanced graduate study in the field and entry-level careers in entertainment design and production within the context of a comprehensive B.A. theatre degree. ASU offers wellequipped theatrical facilities including:

- Extensive and professionally staffed production shops.
- The Galvin Playhouse.
- The Lyceum Theatre.
- The Prism Theatre for student-production work.
- Uniquely equipped rehearsal and instructional spaces.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Admission Requirements: Students are admitted to ASU as theatre exploratory majors. They successfully complete an interview and audition or portfolio review before enrolling as a BA Theatre major. Students may interview before enrolling at ASU or participate in the interview during their first semester of study. Students who enter before interviewing take course work in the first semester to better prepare for the interview. Interviews for admission into the B.A. theatre design and production concentration are conducted each semester and require a portfolio.
Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- the existence of parallel and equal courses in the college's curriculum, and
- departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: The B.A. in theatre program provides an excellent broad-based foundation for work in the profession or readies students for further training at graduate schools or conservatories. The program's liberal arts emphasis prepares graduates for a variety of occupations. The design and production concentration offers students advanced study that can lead to entry-level careers in the performing arts and the entertainment industry as designers or technologists.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Theatre and Film
http://theatrefilm.asu.edu/
GHALL 232
herbergeradvising@asu.edu
480-965-5337

## Theory \& Composition (Composition), BMus (FAMUSTCBM) <br> Campus: TEMPE

Program Description: The B.Mus. in theory and composition with a concentration in composition program focuses on the study of music from a compositional viewpoint. This program may be used as the first step toward a master's or doctoral degree in music theory and composition. The School of Music offers students the opportunity to study with theorists and composers who have established national and international reputations.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: Important: An additional application, supplementary materials, and audition are required for entrance to the School of Music. Please go to http://music.asu.edu/students/prospective/undergrad/apply_SOM.php for information on applying to the School of Music.
Because entrance into the School of Music is selective, you will be asked to indicate a second choice of major when completing your application to ASU. If you pass your audition, the School of Music will change your major to the appropriate music major. In the event that you are admitted to ASU, but not selected for the School of Music, you will be placed in the second major choice you indicated on your application to ASU. Audition days take place in November (for spring admission), and February/March (for fall admission) of each year. More information on the audition process is available here:
http://music.asu.edu/students/prospective/undergrad/apply_Audition.php.
Application Deadlines
Please visit http://music.asu.edu/admissions/deadlines for complete information on School of Music deadlines.
Spring 2012: The deadline for applying to ASU for admission to the B.Mus. in composition is October 1, 2011. A prescreening portfolio is required of all applicants. In addition, a separate prescreening is required for all applicants who wish to audition in voice. Prescreening information: http://music.asu.edu/admissions/prescreening.
Fall 2012: The deadline for applying to ASU for admission to B.Mus. in composition is December 1, 2011. A prescreening portfolio is required of all applicants. In addition, a separate prescreening is required for all applicants who wish to audition in voice.
Prescreening information: http://music.asu.edu/admissions/prescreening.
You must select a different major when applying to ASU after these deadlines. You may apply to the School of Music for the audition day(s) held during your first semester at ASU. The School of Music will change your major to music if you pass your audition. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- The existence of parallel and equal courses in the college's curriculum.
- Departmental or school evaluation of studio and class piano courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU.
Transfer students enrolled in the institute must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: A degree in the arts offers students a pathway to a rich and varied choice of careers. This particular degree program is designed for a student who plans a career as a professional composer, arranger or college-level teacher of theory and composition. College-level teaching does require a graduate degree.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
MUSIC E167
somadmissions@asu.edu
480-965-3371

## Theory \& Composition (Theory), BMus (FAMUSTTBM)

## Campus: TEMPE

Program Description: The B.Mus. in theory and composition with a concentration in theory program focuses on the theoretical study of music. This program may be used as the first step toward a master's or doctoral degree in music theory and composition. The School of Music offers students the opportunity to study with theorists and composers who have established national and international reputations.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: Important: An additional application, supplementary materials, and audition are required for entrance to the School of Music. Please go to http://music.asu.edu/students/prospective/undergrad/apply_SOM.php for information on applying to the School of Music.
Because entrance into the School of Music is selective, you will be asked to indicate a second choice of major when completing your application to ASU. If you pass your audition, the School of Music will change your major to the appropriate music major. In the event that you are admitted to ASU, but not selected for the School of Music, you will be placed in the second major choice you indicated on your application to ASU. Audition days take place in November (for spring admission), and February/March (for fall admission) of each year. More information on the audition process is available here:
http://music.asu.edu/students/prospective/undergrad/apply_Audition.php.
Application Deadlines
Please visit http://music.asu.edu/admissions/deadlines for complete information on School of Music deadlines.
Spring 2012: The deadline for applying to ASU for admission to the B.Mus. in music theory is October 1, 2011 for voice applicants, and October 15, 2011 for instrumental and keyboard applicants. A prescreening is required for all applicants who wish to audition in voice: http://music.asu.edu/admissions/voice.
Fall 2012: The deadline for applying to ASU for admission to B.Mus. in music theory is December 1, 2011 for voice applicants, and January 15, 2012 for instrumental and keyboard applicants. A prescreening is required for all applicants who wish to audition in voice: http://music.asu.edu/admissions/voice.
You must select a different major when applying to ASU after these deadlines. You may apply to the School of Music for the audition day(s) held during your first semester at ASU. The School of Music will change your major to music if you pass your audition. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

- The existence of parallel and equal courses in the college's curriculum.
- Departmental or school evaluation of studio and class piano courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 credit hours in resident credit at ASU.
Transfer students enrolled in the institute must complete a minimum of 15 credit hours of resident credit in the major as approved by the faculty.

Career Opportunities: A degree in the arts offers students a pathway to a rich and varied choice of careers. This particular degree program is designed for a student who plans a career as a professional theorist, composer, arranger or college-level teacher of theory and composition. College-level teaching does require a graduate degree.

## Contact Information:

Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
MUSIC E167
somadmissions@asu.edu
480-965-3371
Engineering, Ira A. Fulton Schools of

## Aerospace Engineering (Aeronautics), BSE (ESAEROBSE)

## Campus: TEMPE

Program Description: The aerospace engineering curriculum provides students with an education in technological areas critical to the design and development of aerospace vehicles and systems. The aeronautics concentration, under the B.S.E. in aerospace engineering, emphasizes aeronautical engineering. Topics in required courses cover:

- Aerodynamics.
- Aerospace materials.
- Aircraft structures.
- Flight mechanics.
- Propulsion.
- Stability and control.

Required astronautics topics include:

- Attitude control.
- Orbital mechanics.
- Rocket propulsion.

Accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-347-7700.

## Additional Program Fee: Y.

Second Language Requirement: $N$.
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university admission standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer students with 24 or more transferable college credit hours:

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).

Career Opportunities: A majority of students entering the field of aerospace engineering desire to work on the design and analysis of aerospace vehicles. Most graduates are employed in the aerospace industry or in government positions related to aerospace. Specific careers in aerospace engineering include:

- Aeronautical and space systems integration.
- Configuration development.
- Material and structural design.
- Propulsion engineering.
- Space mission design and analysis.
- Vehicle and component analysis using computer-aided tools.
- Vehicle design and performance.
- Wind-tunnel and flight testing.

The objectives of the mechanical engineering program are for graduates to be employed in mechanical engineering or a related field or accepted to graduate school. Our gradutes will:

- Be employed as engineers or will be enrolled in (or have graduated from) engineering or professional graduate school.
- Contribute to the design of solutions to complex engineering problems.
- Demonstrate professionalism and will hold positions of increasing responsibility within their organizations.


## Contact Information:

Engineering, Ira A. Fulton Schools of
Mechanical and Aerospace Engineering Program
http://engineering.asu.edu
ECG 202
macme@asu.edu
480-965-2335

## Aerospace Engineering (Astronautics), BSE (ESAEASBSE)

## Campus: TEMPE

Program Description: The aerospace engineering curriculum provides students with an education in technological areas critical to the design and development of aerospace vehicles and systems.
The astronautics curriculum covers:

- Attitude determination and control.
- Elective topics in aeronautics.
- Gas dynamics.
- Orbital mechanics.
- Rocket propulsion.
- Space environment.
- Space structures.
- Telecommunications.

Students in the astronautics concentration culminate their major study with a capstone design project which incorporates the multiple disciplines involved in the creation of a space-going vehicle.
Accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-347-7700.

Additional Program Fee: Y.
Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.

Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university admission standards. International students may have an additional English-language proficiency criterion. Foreign
nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer students with 24 or more transferable college credit hours:

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).

Career Opportunities: A majority of students entering the field of aerospace engineering desire to work on the design and analysis of aerospace vehicles. Most graduates are employed in the aerospace industry or in government positions related to aerospace. Specific careers in aerospace engineering include:

- Aeronautical and space systems integration.
- Configuration development.
- Material and structural design.
- Propulsion engineering.
- Space mission design and analysis.
- Vehicle and component analysis using computer-aided tools.
- Vehicle design and performance.
- Wind-tunnel and flight testing.

The objectives of the mechanical engineering program are for graduates to be employed in mechanical engineering or a related field or accepted to graduate school. Our graduates will:

- Be employed as engineers or will be enrolled in (or have graduated from) engineering or professional graduate school.
- Contribute to the design of solutions to complex engineering problems.
- Demonstrate professionalism and will hold positions of increasing responsibility within their organizations.


## Contact Information:

Engineering, Ira A. Fulton Schools of
Mechanical and Aerospace Engineering Program
http://engineering.asu.edu/macme
ECG 202
macme@asu.edu
480-965-2335

## Biomedical Engineering, BSE (ESBMEBSE)

## Campus: TEMPE

Program Description: Biomedical engineering uses principles and methods from engineering and the physical sciences to solve problems in biology and medicine.

Our first primary goal is to produce high-quality graduates with a broad-based education in engineering and the life and natural sciences who are well prepared for further graduate study in biomedical engineering, a career in biomedical research, or entry into a medical or other health professional school.
The second primary goal is to graduate students who apply their skills in an ethical, sustainable and environmentally responsible manner to make contributions that address societal and individual needs.
Our objective is to prepare students:

- For productive employment, graduate study, or professional programs, especially in human and animal medicine, biotechnology and related biology-based engineering fields.
- Who continue to develop technical knowledge, awareness and leadership abilities to address domestic or global issues in human health.
- Who will ethically and responsibly contribute to society, drawing from an integrated, multidisciplinary biomedical engineering education, focusing on sustainability and environmentalism.

Accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-347-7700.

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.

Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university admission standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5. Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer students with 24 or more transferable college credit hours must meet EITHER the primary OR the secondary criteria (not both):

## Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 3.00 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: Biomedical engineers are employed in industry, hospitals and research facilities affiliated with educational and medical institutions, education and governmental regulatory agencies. They often serve a coordinating or interfacing function, using their background in both the engineering and medical fields. In industry, they may create designs where an in-depth understanding of living systems and technology is essential. They may be involved in performance testing of new or proposed products. Government positions often involve product testing and safety, as well as establishing safety standards for devices. In the hospital, the biomedical engineer may provide advice on the selection and use of medical equipment and supervise performance
testing and maintenance of the selected equipment. Biomedical engineers may also build customized devices for special health care or research needs.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Harrington Bioengineering Program
http://engineering.asu.edu/bhse
ECG 334
sbhse@asu.edu
480-965-3028

## Chemical Engineering, BSE (ESCHEBSE)

Campus: TEMPE

Program Description: Chemical engineering deals with the application of chemistry, physics and mathematics to the process of converting raw materials or chemicals into more useful or valuable forms. Chemical engineering also involves the design of valuable new materials and chemical products.
The B.S.E. offered in the chemical engineering program builds on a broad base of knowledge within the basic and mathematical sciences and engineering, and offers excellent career opportunities. Chemical engineers are engaged in the development and production of a diverse range of products, including high performance materials needed for aerospace, automotive, biomedical, electronic, environmental and military applications. The modern discipline of chemical engineering is intertwined with biology and biomedical engineering.
Accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-347-7700.

Additional Program Fee: Y .
Second Language Requirement: $N$.
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university admission standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer students with 24 or more transferable college credit hours:

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).

Career Opportunities: Chemical engineers have traditionally played a key role in industries as varied as:

- Artificial fibers.
- Ceramics.
- Food.
- Glass.
- Petrochemicals.
- Petroleum.
- Plastics.
- Primary metals.
- Specialty chemicals.

Newer areas, such as semiconductors, biotechnology, biomedical engineering, modern materials (composites, superconductors) and the solution of environmental problems, have also generated more opportunities for chemical engineers. These factors, along with the recent recovery and reported record earnings of the chemical and petroleum industries, have created a great demand for chemical engineering graduates.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Chemical Engineering Program
http://engineering.asu.edu/macme
ECG 202
macme@asu.edu
480-965-2335

## Civil Engineering, BSE (ESCEEBSE)

Campus: TEMPE
Program Description: Civil engineering majors in the Ira A. Fulton Schools of Engineering have four choices within the B.S.E. accredited program:

- Civil engineering.
- Civil engineering with construction engineering concentration.
- Civil engineering with environmental engineering concentration.
- Civil engineering with sustainable engineering concentration.

The first choice allows students to choose among design and technical elective courses in their senior year. The other choices specify design and technical courses to students with minimal choices. Regardless of choice, the B.S.E. in civil engineering is accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-3477700.

Civil engineering involves the analysis, planning, design, construction, maintenance and application of sustainable practices in all areas of urban infrastructure for government, commerce, industry and the public domain. These include:

- Airports.
- Bridges.
- Canals.
- Dams.
- Factories.
- Office towers.
- Roadway systems.
- Schools.
- Tunnels and subway systems.
- Water purification facilities.

Civil engineers are concerned with the impact their projects have on the public and the environment; they coordinate the needs of society with technical and economic feasibility.
The curriculum exposes students to various areas of civil engineering, including:

- Construction engineering.
- Environmental engineering.
- Geotechnical engineering.
- Structures.
- Transportation.
- Hydrosystems engineering.


## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: ASU graduates with a B.S.E. in civil engineering readily find employment. Civil engineers work in many different types of companies, from large corporations to small, private consulting firms, or governmental agencies. A civil engineering background is an excellent foundation for jobs in management and public service. Civil engineering is one of the best engineering professions from the viewpoint of international travel opportunities or for eventually establishing one's own consulting business. The B.S.E. in civil engineering prepares graduates for the Fundamentals of Engineering (FE) examination, the Professional Engineering (PE) examination and graduate degrees.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Civil, Environmental and Sustainable Eng Program
http://engineering.asu.edu/sebe
ECG 251
sebe@asu.edu
480-965-3589

## Civil Engineering (Construction Engineering), BSE (ESCEECBSE)

Campus: TEMPE
Program Description: Civil engineering majors in the Ira A. Fulton Schools of Engineering have four choices within the B.S.E. accredited program:

- Civil engineering.
- Civil engineering with construction engineering concentration.
- Civil engineering with environmental engineering concentration.
- Civil engineering with sustainable engineering concentration.

The first choice allows students to choose among design and technical elective courses in their senior year. The other choices specify design and technical courses to students with minimal choices. Regardless of choice, the B.S.E. in civil engineering is accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-3477700.

The faculty in the Ira A. Fulton Schools of Engineering offer a B.S.E. in civil engineering, with a concentration in construction engineering. Civil engineering is primarily concerned with the public domain and application of sustainable practices in all areas of urban infrastructure. The emphasis in construction involves design, construction techniques, maintenance and operation of many types of facilities for government, commerce and industry. These include:

- Airports.
- Bridges.
- Canals.
- Dams.
- Environmental protection facilities, such as solid waste and water treatment systems.
- Factories.
- Office towers.
- Roadway systems.
- Schools.
- Tunnels and subway systems.

In addition to construction engineering, the curriculum exposes students to other areas of civil engineering, including:

- Environmental engineering.
- Geotechnical engineering.
- Structures.
- Transportation.
- Hydrosystems engineering.

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both):

## Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: ASU graduates with a B.S.E. in civil engineering find employment in consulting firms, design and build firms, municipalities, regulatory agencies and state agencies. A civil engineering background is an excellent foundation for jobs in management and public service.
International opportunities are abundant and are likely to expand. The B.S.E. in civil engineering prepares graduates for the Fundamentals of Engineering (FE) examination, the Professional Engineering (PE) examination and graduate degrees.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Civil, Environmental and Sustainable Eng Program
http://engineering.asu.edu/sebe
ECG 202
sebe@asu.edu
480-965-3589

## Civil Engineering (Environmental Engineering), BSE (ESCEEEBSE)

Campus: TEMPE

Program Description: Civil engineering majors in the Ira A. Fulton Schools of Engineering have four choices within the B.S.E. accredited program:

- Civil engineering.
- Civil engineering with construction engineering concentration.
- Civil engineering with environmental engineering concentration.
- Civil engineering with sustainable engineering concentration.

The first choice allows students to choose among design and technical elective courses in their senior year. The other choices specify design and technical courses to students with minimal choices. Regardless of choice, the B.S.E. in civil engineering is accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-3477700.

The faculty in the Ira A. Fulton Schools of Engineering offer a B.S.E. in civil engineering, with a concentration in environmental engineering. Environmental engineering is a multidisciplinary field based on traditional civil engineering principles, chemistry, biology and geology. Environmental engineers are involved with:

- Air pollution technology.
- Analysis of the fate and transport of pollutants in natural environments.
- Application of sustainable practices in all areas of urban infrastructure.
- Construction of hazardous waste containment systems.
- The design and operation of water and wastewater treatment systems.
- Remediation of contaminated soils and waters.
- Surface water quality management.
- Water conservation and reuse.

In addition to environmental engineering, the curriculum exposes students to other areas of civil engineering, including hydrosystems engineering, structures, geotechnical engineering and transportation.

Additional Program Fee: Y.
Second Language Requirement: N.

First Required Math Course: MAT 265 Calculus for Engineers I.

Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: ASU graduates with a B.S.E. in civil engineering with a concentration in environmental engineering find employment in consulting firms, municipalities, regulatory agencies and industry. The growth of environmental engineering positions has been balanced by the growing number of students entering the field, resulting in a stable job market.
A civil engineering background is an excellent foundation for jobs in management and public service. International opportunities are abundant and are likely to expand. The B.S.E. in civil engineering prepares graduates for the Fundamentals of Engineering (FE) examination, the Professional Engineering (PE) examination and graduate degrees.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Civil, Environmental and Sustainable Eng Program
http://engineering.asu.edu/sebe
ECG 251
sebe@asu.edu
480-965-3589

## Civil Engineering (Sustainable Engineering), BSE (ESCEESUBSE)

Campus: TEMPE
Program Description: Civil engineering majors in the Ira A. Fulton Schools of Engineering have four choices within the B.S.E. accredited program:

- Civil engineering.
- Civil engineering with construction engineering concentration.
- Civil engineering with environmental engineering concentration.
- Civil engineering with sustainable engineering concentration.

The first choice allows students to choose among design and technical elective courses in their senior year. The other choices specify design and technical courses to students with minimal choices. Regardless of choice, the B.S.E. in civil engineering is accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-3477700.

The faculty in the Ira A. Fulton Schools of Engineering offer a B.S.E. in civil engineering, with a concentration in sustainable engineering. With limited world resources, especially in urban areas, there is large demand for new sustainable engineering approaches and technologies in order to maintain and improve the quality of life for future generations. Sustainable engineering incorporates systems modeling and life cycle approaches to assessing the resiliency and material selection across all areas of urban infrastructure, or built environment, currently addressed within the civil engineering degree. The program is designed to provide students with exposure to material from several disciplines that comply with the principles of economic, social and ecological sustainability and apply them to traditional civil engineering areas of environmental engineering, hydrosystems engineering, structures, geotechnical engineering and transportation.

Additional Program Fee: Y.
Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.

Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).

Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: Many jobs are currently available that are applicable to the civil engineers with sustainable engineering concentration in different types of companies, from large corporations to small, private consulting firms, or governmental agencies. Civil engineering is one of the best engineering professions from the viewpoint of international travel opportunities or for eventually establishing one's own consulting business. The B.S.E. in civil engineering prepares graduates for the Fundamentals of Engineering (FE) examination, the Principles and Practice of Engineering (PE) examination and graduate degrees.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Civil, Environmental and Sustainable Eng Program

## Computer Science, BS (ESCSEBS)

## Campus: TEMPE

Program Description: Computer science professionals design, analyze and improve the quality of computer software and systems for a variety of applications, including:

- Artificial intelligence.
- Computer vision.
- Graphics.
- Information management.
- Internet.
- Multimedia.
- Security.


## Examples of projects a computer scientist might work on include:

- Computer networking.
- Database and information systems.
- Distribution processing systems.
- Gaming systems.
- Next-generation computing systems.
- Search engines.
- Software engineering.
- Web services.

The program focuses on the design of computers, computational processes for problem solving, and information transfer and transformation with an emphasis in improving software and system quality, security, performance and usability. The program supports the evolution of the computing and informatics disciplines, and the integration of computer and information sciences with engineering, science and other disciplines.
Accredited by the Computing Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-347-7700.

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: Graduates with a degree in computer science find employment working in a variety of capacities ranging from computer and software design to development of information technologies. Their jobs are often distinguished by the high level of theoretical expertise they apply to solving complex problems and the creation and application of new technologies. Some computer science-related jobs may include:

- Creating video games and systems.
- Designing artificial intelligence systems.
- Developing network security applications.
- Inventing and implementing more efficient systems for managing data management, including information retrieval and search on the Internet.

With the theoretical foundation built in the program, computer science graduates can excel in system and software development, as well as in designing effective computing solutions for emerging and challenging problems in modern society. Skills in system development and research can lead to entrepreneurial activity that produces innovative computing products and services. Three to five years after graduation, the alumni of the B.S. degree in computer science will:

- Be engaged in lifelong learning to maintain currency in an ever-changing field, to innovate, and to attain professional advancement.
- Communicate effectively to all constituencies and uphold a commitment to professional and ethical conduct.
- Have demonstrated the ability of analyzing and solving complex technical problems from a broad perspective of computer science, including business, societal, and regulatory issues.
- Have demonstrated the ability to tackle challenging computing problems using a comprehensive knowledge of computer science, while reflecting a commitment to quality, innovation, critical thinking, and continuous improvement.
- Have functioned as both a leader and collaborative team member within different environments.


## Contact Information:

Engineering, Ira A. Fulton Schools of
Computer Science and Engineering Program
http://engineering.asu.edu/cidse
BYENG 208
cidse.advising@asu.edu
480-965-3199

## Computer Science (Information Assurance), BS (ESCSEIBS)

## Campus: TEMPE

Program Description: Information Assurance (IA) concentration in computer science B.S. degree program provides students with the knowledge, skills and the advanced development capability in science for building dependable and secure information systems and networks, and ensuring the integrity and quality of the information being stored, processed and transmitted by information systems and networks. The curriculum of the concentration spans broad areas of IA including:

- Applied cryptography.
- Computer and network security.
- Computer forensics.
- Data and information security.
- Software security.

ASU has been certified as a National Center of Academic Excellence in Information Assurance Education (CAEIAE) and a National Center of Academic Excellence in Information Assurance - Research (CAE-R) by the National Security Agency and the Department of Homeland Security. IA courseware at ASU has been certified by the Information Assurance Courseware Evaluation (IACE) Program to satisfy the standards for 1) Information Systems Security (INFOSEC) Professionals (NSTISSI 4011), and 2) Senior Systems Managers (CNSSI 4012).

Additional Program Fee: Y.
Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: Students enrolled in our IA concentration are eligible for federal fellowships such as the Department of Defense Information Assurance Scholarship Program (IASP) and the Federal Cyber Service Scholarship for Service Program (SFS). Graduates with a degree in computer science with IA concentration find employment in a variety of capacities ranging from computer system and software development to research on information assurance technologies. Some related jobs may include:

- Analyzing computer forensic data.
- Designing secure information systems.
- Implementing secure software and network applications.
- System security and penetration testing.


## Contact Information:

Engineering, Ira A. Fulton Schools of Computer Science and Engineering Program
http://engineering.asu.edu/cidse
BYENG 208
cidse.advising@asu.edu
480-965-3199

## Computer Science (Software Engineering), BS (ESCSESBS)

## Campus: TEMPE

Program Description: The software engineering concentration is appropriate for computer science students seeking a career as a software engineer. Software engineering concentration students will learn advanced processes, methodologies and tools for developing and testing both large and small software applications in emerging areas such as:

- Enterprise systems.
- Service-orientated computing.
- Systems of systems.

They will also learn information assurance techniques for developing these applications. The curriculum prepares students to assume leadership roles in software development organizations, and to practice professional standards and emerging software technology to the software engineering life-cycle activities.
Accredited by the Computing Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-347-7700.

Additional Program Fee: Y.
Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: Career opportunities are strong and numerous for software engineering concentration graduates. Graduates possess the knowledge and skills to work across the spectrum of software development process activities including:

- Architecture.
- Coding.
- Project management.
- Quality assurance.
- Requirements engineering.
- Testing.

Career paths include:

- Software analyst.
- Software architect.
- Software engineer.
- Software task leader.
- Software tester.

Software engineering concentration graduates find employment in both large and small organizations that develop, employ and manage software systems. They work on all types of projects from large, complex engineering systems, distributed banking, financial and government software, to gaming.

## Contact Information:

Engineering, Ira A. Fulton Schools of Computer Science and Engineering Program
http://engineering.asu.edu/cidse
BYENG 208
cidse.advising@asu.edu
480-965-3199

## Computer Systems Engineering, BSE (ESCSEBSE)

## Campus: TEMPE

Program Description: The computer systems engineering program focuses on the analysis, design, testing, integration and evaluation of hardware and software systems. The curriculum is grounded in an array of engineering disciplines, including the applications of science and technology to the design of:

- Computer architecture.
- Computer security.
- Digital circuits.
- Distributed systems.
- Networking.
- Operating systems.

Students engage in the design of integrated hardware and software solutions for computing, communication and control applications. They practice many aspects of engineering activities, such as the development of:

- Computer networks.
- Embedded and ubiquitous systems.
- High performance computer systems.
- Individual digital components.

Students become skilled at interfacing different pieces of hardware and software components, and integrating systems and products with new capabilities and improved quality and performance.
Accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-347-7700.

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.

Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: Computer systems engineers are employed in industry, government, education and consulting and are concerned with the design, development and operation of hardware and software components of a computer system. Computer engineers often find themselves focusing on engineering problems or challenges that result in new state-of-the-art products that integrate computing and communication capabilities. They work on the development verification and testing of computer hardware and software, from chips to device controllers and embedded systems. Computer engineers frequently find jobs that involve designing new applications of computers and other devices, such as those used in:

- Airplanes.
- Digital television and photography.
- Intelligent highways and control systems for cars.
- New apparatuses for the sight-impaired or others with physical disabilities.
- New cell phone technologies.
- Security and defense systems.
- Space vehicles.

Three to five years after graduation, the alumni of the B.S.E. degree in computer systems engineering will:

- Be engaged in lifelong learning to maintain currency in an ever-changing field, to innovate and to attain professional advancement.
- Communicate effectively to all constituencies and uphold a commitment to professional and ethical conduct.
- Have demonstrated the ability of analyzing and solving complex technical problems from a broad perspective of engineering, including business, societal and regulatory issues.
- Have demonstrated the ability to tackle complex integrated software and hardware systems challenges using a comprehensive knowledge of computer systems engineering, while reflecting a commitment to quality, innovation, critical thinking and continuous improvement.
- Have functioned as both a leader and collaborative team member within different environments.


## Contact Information:

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http://engineering.asu.edu/cidse
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480-965-3199

## Computer Systems Engineering (Information Assurance), BSE (ESCSEIBSE)

Campus: TEMPE
Program Description: Information Assurance (IA) concentration in computer systems engineering B.S.E. degree program provides students with the knowledge, skills and the advanced development capability in engineering for building dependable and secure information systems and networks, and ensuring the integrity and quality of the information being stored, processed and transmitted by information systems and networks. The curriculum of the concentration spans broad areas of IA including security at:

- Applied cryptography and computer forensics.
- Data and information security.
- Software security.
- Systems, networks and infrastructure levels.

ASU has been certified as a National Center of Academic Excellence in Information Assurance Education (CAEIAE) and a National Center of Academic Excellence in Information Assurance - Research (CAE-R) by the National Security Agency and the Department of Homeland Security. IA courseware at ASU has been certified by the Information Assurance Courseware Evaluation (IACE) Program to satisfy the standards for 1) Information Systems Security (INFOSEC) Professionals (NSTISSI 4011), and 2) Senior Systems Managers (CNSSI 4012).

Additional Program Fee: $Y$.
Second Language Requirement: $N$.
First Required Math Course: MAT 265 Calculus for Engineers I.

Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: Students enrolled in our IA programs are eligible for federal fellowships such as the Department of Defense Information Assurance Scholarship Program (IASP) and the Federal Cyber Service Scholarship for Service Program (SFS). Graduates with a degree in computer systems engineering with IA concentration find employment in a variety of capacities ranging from computer system and software development to research on information assurance technologies. Some related jobs may include:

- Analyzing computer forensic data.
- Designing secure information systems.
- Implementing secure software and network applications.
- Including embedded systems security.
- System security and penetration testing.


## Contact Information:

Engineering, Ira A. Fulton Schools of Computer Science and Engineering Program
http://engineering.asu.edu/cidse
BYENG 208
cidse.advising@asu.edu
480-965-3199

## Construction Engineering, BSE (ESCONBSE)

## Campus: TEMPE

Program Description: The B.S.E. in construction engineering focuses on a combination of design and management topics preparing the student for a career in the engineering and construction industry. The degree prepares students who wish to gain a professional engineering license while working at the interface of design and construction; it is desirable to those students who are interested in a career emphasizing construction of infrastructure. The degree makeup includes engineering design and construction management courses with a focus on sustainability and building information modeling topics. Construction management content includes:

- Contract management.
- Construction methods.
- Cost and schedule control.
- People management.
- Project estimating.

The curriculum's design content includes structures, geotechnical engineering and transportation. Students are further prepared with the computer, management, technical and people skills needed to succeed. This degree is the third in the Southwestern U.S. and one of about 20 worldwide.

Additional Program Fee: Y .
Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: The construction engineering graduate will be prepared to begin as a field engineer, project engineer or project designer working for facililty owners, design firms, construction companies, specialty subcontractors or material suppliers. The graduate will have unique skills which will allow them to take on the role of integrator in the delivery of design build projects or development activities. As the graduate's career progresses, each should be able to take on leadership roles in the delivery of sustainable facilities in the built environment and then progress through succesively higher levels of management responsibility. The graduate should be particularly attuned to design and construction of heavy civil and industrial facililties meeting the infrastructure needs of society.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Del E. Webb Construction
http://engineering.asu.edu/sebe
ECG 251
sebe.advising@asu.edu
480-965-0595

## Construction Management (Concrete Industry Management), BS (ESCONIMBS)

## Campus: TEMPE

Program Description: The Del E. Webb School of Construction program offers the B.S. in construction with a concentration in concrete industry management. Concrete industry management graduates are broadly educated, articulate managers grounded in basic construction management, who are knowledgeable about concrete technology and techniques and are able to manage people and systems and to promote products or services in the concrete industry.

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering
requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: The concrete industry management concentration provides a foundation for students who wish to pursue careers as project managers, estimators, schedulers or a combination of all three at an executive level. Concrete industry management career opportunities include:

- Advanced mixing technology or equipment manufacturing.
- Cement.
- Concrete or general contracting.
- Concrete production.
- Development.
- Field sales.
- Operations.
- Project and production management.
- Technical service.


## Contact Information:

Engineering, Ira A. Fulton Schools of
Del E. Webb Construction
http://engineering.asu.edu/sebe
ECG G251
sebe@asu.edu
480-965-3615

## Construction Management (General Building Construction), BS (ESCONGBS)

Campus: TEMPE
Program Description: Through the B.S. in construction program (with a concentration in general building construction), students learn to organize, lead and manage the building process. Builders are one of the three most vital individuals on a job site, equal in status and importance to the architect and engineer. Students learn:

- The basics of design.
- How to estimate and control the costs of a project.
- The many construction methods used.
- What it takes to manage the people involved and the various types of contracts.

Students are prepared with the computer, management, technical and people skills needed to succeed. This is one of two construction programs in the state of Arizona and one of approximately 60 accredited programs in the nation.

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: The general building construction concentration provides a foundation for students who wish to pursue careers as estimators, project managers, project engineers and eventually become owners of firms engaged in the construction of industrial, commercial and institutional structures.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Del E. Webb Construction
http://engineering.asu.edu/sebe
ECG 251
sebe@asu.edu
480-965-3615

## Construction Management (Heavy Construction), BS (ESCONHBS)

Campus: TEMPE

Program Description: Through the B.S. in construction program (with a concentration in heavy construction), students learn to organize, lead and manage the building process. Builders are one of the two most vital people on a job site, equal in status and importance to the engineer. Students learn:

- The basics of design.
- How to estimate and control the costs of a project.
- The many construction and equipment methods used.
- The various types of contracts.
- What it takes to manage the people involved.

Students are prepared with the computer, management, technical and people skills needed to succeed. This is one of two construction programs in the state of Arizona and one of approximately 60 accredited programs in the nation.

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: The heavy construction concentration prepares students for careers related to the public works discipline. Graduates become project managers, estimators, schedulers or a combination of all three at an executive level. Typical heavy construction-oriented projects include:

- Airports.
- Bridges.
- Canals.
- Dams.
- Harbor and water facilities.
- Highways.
- Pipelines.
- Power plants.
- Rapid transit systems.
- Sewerage systems.
- Tunnels.
- Water works.

Heavy construction managers, through education and experience, are capable of implementing significant facets of construction on a timely and economical basis with proficiency and integrity.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Del E. Webb Construction
http://engineering.asu.edu/sebe
ECG 251
sebe@asu.edu
480-965-3615

## Construction Management (Residential Construction), BS (ESCONRBS) <br> \section*{Campus: TEMPE}

Program Description: Through the B.S. in construction program (with a concentration in residential construction), students learn to organize, lead and manage the building process. Builders are one of the three most vital people on a job site, equal in status and importance to both the architect and engineer. This program teaches:

- The basics of design.
- How to estimate and control the costs on a project.
- The many construction methods used.
- What it takes to manage the people involved and the various types of contracts.

Students are prepared with the computer, management, technical and people skills needed to succeed. This is one of two construction programs in the state of Arizona and one of approximately 60 accredited programs in the nation.

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: The residential construction concentration prepares students for careers in the housing sector of the industry. Graduates become project managers, estimators, schedulers or a combination of all three at the executive level.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Del E. Webb Construction
http://engineering.asu.edu/sebe
ECG 251
sebe@asu.edu
480-965-3615

## Construction Management (Specialty Construction), BS (ESCONSBS) Campus: TEMPE

Program Description: Through the B.S. in construction program (with a concentration in specialty construction), students learn to organize, lead and manage the building process with an emphasis on construction at the subcontractor level. This concentration emphasizes the construction process from a subcontractor's perspective including mechanical, electrical and other speciality contractor management and methods. Students learn:

- The basics of design.
- How to estimate and control the costs of a project.
- The many construction methods used.
- What it takes to manage the people involved and the various types of contracts.

Students are prepared with the computer, management, technical and people skills needed to succeed. This is one of two construction programs in the state of Arizona and one of approximately 60 accredited programs in the nation.

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).

Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: The specialty construction concentration prepares students for careers with contractors, working with mechanical, electrical and construction firms. It also prepares the student for careers in management at specialty contracting firms, such as:

- Control systems.
- Electrical.
- Mechanical.
- Steel erection and others.


## Contact Information:

Engineering, Ira A. Fulton Schools of
Del E. Webb Construction
http://engineering.asu.edu/sebe
ECG 251
sebe@asu.edu
480-965-3615

## Electrical Engineering, BSE (ESEEEBSE)

Campus: TEMPE
Program Description: The goal of the electrical engineering undergraduate program is to prepare graduates for positions as electrical engineers. Faculty in the Ira A. Fulton Schools of Engineering offer a B.S.E. in electrical engineering. Following initial course work in mathematics and sciences, the foundation classes build a solid base of engineering knowledge. The electrical engineering curriculum includes a number of required upper division electrical engineering and technical elective courses; areas include:

- Circuits.
- Computer engineering.
- Electromagnetics.
- Power.
- Solid-state devices.
- Systems.

Approved technical elective courses provide students with an opportunity either to broaden their background in electrical engineering or to study, in greater depth, technical subjects in which they have special interest.
Accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-347-7700.

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must
meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: Graduates with the B.S.E. in electrical engineering find many exciting opportunities in industry. These include:

- Communication equipment and network providers.
- Computers and peripheral devices manufacturers and defense organizations.
- Consulting companies.
- Electric power utilities.
- Semiconductor chip designers and manufacturers.

The degree also prepares graduates for continued learning experiences, either in a formal graduate program or in continuing education applications.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Department of Electrical Engineering
http://engineering.asu.edu/ecee
GWC 205
askee@asu.edu
480-965-3424

## Electrical Engineering (Electric Power and Energy Systems), BSE (ESEEEPBSE)

## Campus: TEMPE

Program Description: The goal of the electric power and energy systems concentration is to prepare graduates for positions in industries dealing with generation, transmission and utilization of electric power. Generation includes conventional power generation (fossil fuel and nuclear) and alternative energy systems, including solar, wind and fuel cells. Students in this concentration will complete the foundation courses in math, science and engineering. They are then required to take the pathway course in electric power and complete nine of the 15 technical elective credit hours with power classes. In addition, the senior design capstone project should be in the area of electric power and energy systems.

Accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-347-7700.

Additional Program Fee: Y.
Second Language Requirement: N .
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: Career opportunities for graduates with a concentration in electric power and energy systems include:

- Consulting engineer firms.
- Employment in utility companies.
- Entrepreneurial opportunities.
- Power equipment manufacturers.
- Research and design organizations.
- State, federal, and municipal agencies.

This concentration will also prepare students to pursue graduate degrees in the areas of:

- Power generation.
- Power systems.
- Power transmission and distribution.
- Renewable and sustainable energy sources.


## Contact Information:

Engineering, Ira A. Fulton Schools of Department of Electrical Engineering http://engineering.asu.edu/ecee

GWC 205
askee@asu.edu
480-965-3424

## Engineering Management, BSE (ESEMGBSE)

Campus: TEMPE
Program Description: The program in engineering management is designed to provide the graduate with the skills for effective management and leadership of engineering-driven enterprises. The curriculum provides a breadth of engineering science and design with depth in one specific area suitable for practice. This knowledge is augmented with an understanding of business practices, organizational behavior and management skills to enable to graduate to succeed in the management of a scientific or engineering enterprise. Topics such as project and resource management, financial engineering, risk management, configuration management, service plans, product liability, entrepreneurship and operations management are covered, in addition to product design and process development.

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission requirements for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university admission requirements. Students should select a second major choice when applying for admission to a degree program in the Ira A. Fulton Schools of Engineering.
International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1100 SAT combined math and verbal or minimum 23 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- Admission may be granted with one deficiency in no more than two competency areas. Deficiencies in both math and laboratory science are not acceptable.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 2.75 for less than 24 transfer hours, and
- Satisfy the freshmen admission requirements.

Transfer students with more than 24 transferable college credit hours:

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- If Undergraduate Admissions requires submission of a high school transcript, admission may be granted with one deficiency in no more than two competency areas. Deficiencies in both math and laboratory science are not acceptable.

Career Opportunities: The engineering management graduate will be prepared to begin as a project management team member or lead, system specification and customer relationship management specialist, production supervisor, supply logistics engineering or similar role, and then progress through successively higher levels of management responsibility.
The graduate will leave with a deep understanding of at least one industry sector based upon the focus area they select.

## Contact Information:

Engineering, Ira A. Fulton Schools of Industrial, Systems \& Operations Engineering Prgm
http://engineering.asu.edu/cidse
BYENG 208
cidse.advising@asu.edu
480-965-3199

## Engineering Special Studies (Premedical Engineering), BSE (ESESPPBSE)

## Campus: TEMPE

Program Description: In the past decade, the interrelation between engineering and medicine has become vigorous and exciting. Rapidly expanding technology dictates that engineering will continue to become increasingly involved in all branches of medicine. As this involvement develops, so will the need for physicians trained in the engineering sciences: medical professionals with a knowledge of computer technology, transport phenomena, biomechanics, bioelectric phenomena, operations research and cybernetics.

Additional Program Fee: Y.
Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.

Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university admission standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5. Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer students with 24 or more transferable college credit hours must meet EITHER the primary OR the secondary criteria (not both):
Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 3.00 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: This program's focus is of special interest to students who desire entry into a medical college and whose medical interests lie in:

- Aerospace and undersea medicine.
- Artificial organs.
- Biomedical engineering.
- Biophysics.
- Prostheses.
- Research.


## Contact Information:

Engineering, Ira A. Fulton Schools of Engineering Special Studies Program http://engineering.asu.edu/bhse ECG 334

## Industrial Engineering, BSE (ESIEEBSE)

## Campus: TEMPE

Program Description: Industrial engineers design and manage complex systems in the manufacturing and service industries through the integration of:

- Capital.
- Energy.
- Equipment.
- Information.
- People.
- Processes.
- Materials.

Industrial engineering applies systems modeling and analysis skills to ensure that high-quality products and services are achieved with the optimal use of resources. Industrial engineering focuses on the total picture of developing, producing, delivering and servicing products and services to meet societal needs. The industrial engineer blends knowledge of mathematics, engineering principles, computing technologies, systems modeling and simulation tools and human factors with strong management and communication skills to achieve this goal. This gives an industrial engineer broad knowledge of organizations and provides increased opportunities for advancement into management and leadership.
Accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-347-7700.

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).
- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: Graduates in industrial engineering are prepared to design and manage systems for a wide range of organizations. They find exciting career opportunities in all types of manufacturing and service industries, including:

- Aerospace.
- Automotive.
- Banking.
- Defense.
- Finance.
- Government.
- Healthcare.
- Management consulting.
- Semiconductor manufacturing.
- Telecommunications.
- Transportation.


## Contact Information:

Engineering, Ira A. Fulton Schools of
Industrial, Systems \& Operations Engineering Prgm
http://engineering.asu.edu/cidse
BYENG 208
cidse.advising@asu.edu
480-965-3199

## Informatics, BS (ESCPIBS)

Campus: TEMPE

Program Description: The Bachelor of Science (B.S.) informatics program will be an interdisciplinary degree that combines mastery of general techniques for processing information with specialization in an application area and its information processing problems. The design of the degree responds to the rapidly growing need for skilled workers who can take a problem-driven, system-level, user-oriented perspective toward information and computing, who can apply current informatics methods to address society's needs, and who can contribute to the next generation of such systems.
The program begins with the fundamentals of informatics in a general setting and in the context of disciplinary applications. The student will select a focal area such as educational informatics, geo-informatics, etc. They will take prescribed courses and complete a two-course capstone project in the focal area. Thus, informatics graduates will remain highly interdisciplinary, yet have a specialization that gives them a head start on one possible career in informatics.

## Additional Program Fee: Y.

## Second Language Requirement: N .

MAT 210 - Brief Calculus or MAT 265 - Calculus for Engineers I

Admission Requirements: The admission requirements for a Bachelor of Science in informatics are higher than minimum university admission requirements. Students should select a second major choice when applying for admission to a degree program in the Ira A. Fulton Schools of Engineering.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://students.asu.edu/international-admission) and admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- A competency deficiency in either math or laboratory science is allowed. Competency deficiencies in both math and science are not allowed.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- A competency deficiency in either math or laboratory science is allowed. Competency deficiencies in both math and science are not allowed, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer students with more than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- A competency deficiency in either math or laboratory science is allowed. Competency deficiencies in both math and science are not allowed (if Undergraduate Admissions requires submission of a high school transcript).

Career Opportunities: An ASU informatics graduate will have the ability to develop future information technology solutions that place a strong emphasis on user needs and provide the ability to adapt and change dynamically with society's needs. This makes informaticians strong candidates for jobs in technology start-ups, management consulting firms, technology research centers and graduate programs offering emphasis in emerging technologies.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Computer Science and Engineering Program
http://engineering.asu.edu/cidse
BYENG 208
cidse.advising@asu.edu
480-965-3199

## Materials Science \& Engineering, BSE (ESMSEBSE)

Campus: TEMPE

Program Description: Materials engineers are responsible for designing and developing new and improved materials for a wide variety of engineering applications. The faculty in the Ira A. Fulton Schools of Engineering offer a B.S.E. in materials science and engineering. Courses in materials teach students about the structure of materials, how to process them to improve their structure and how the structure affects their properties and performance.
Accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-347-7700.

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.

Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer student with 24 or more transferable college credit hours must meet EITHER the primary OR secondary criteria (not both): Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).


## Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses).

Career Opportunities: Materials engineers are in demand in a wide range of industries, including the automotive, aerospace, electronics, energy, semiconductor, computer and health care professions. The career paths in these industries offer opportunities to impact technological advances through working in a team environment with engineers from the chemical, electrical, mechanical, aerospace and other engineering disciplines.

## Contact Information:

Engineering, Ira A. Fulton Schools of
Materials Program
http://engineering.asu.edu/macme
ECG 202
macme@asu.edu
480-965-2335

## Mechanical Engineering, BSE (ESMAEMBSE)

Campus: TEMPE
Program Description: Mechanical engineering is a creative, diverse discipline. Mechanical engineers design, build and control the devices, machines, processes, and systems that are the mainstay of modern industrialized society.
Students are prepared for a career in mechanical engineering through a curriculum that includes study of the principles governing energy transfer, mechanical design, sensors and control devices and the application of these principles to the creative solution of practical modern problems.
Accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-347-7700.

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.

Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university admission standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer students with 24 or more transferable college credit hours:

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).

Career Opportunities: A major strength of a mechanical engineering education is the flexibility it provides in future employment opportunities for its graduates. Mechanical engineers are employed in virtually every kind of industry. They are involved in seeking new knowledge through research; in generating creative design and development; and in the production, control, management and sales of the devices and systems needed by society.
The objectives of the mechanical engineering program are for graduates to be employed in mechanical engineering or a related field or accepted to graduate school and:

- Our graduates will be employed as engineers or will be enrolled in (or have graduated from) engineering or professional graduate school.
- Our graduates will be sought out to contribute to the design of solutions to complex engineering problems.
- Our graduates will demonstrate professionalism and will hold positions of increasing responsibility within their organizations.


## Contact Information:

Engineering, Ira A. Fulton Schools of
Mechanical and Aerospace Engineering Program
http://engineering.asu.edu/macme
ECG 202
macme@asu.edu
480-965-2335

## Mechanical Engineering (Computational and Mathematical Mechanics), BSE (ESMAECBSE)

Campus: TEMPE

Program Description: As mathematical and numerical modeling takes on a much larger role in product development, graduates who are highly skilled in computational and mathematical engineering will be in high demand. The concentration in computational and mathematical mechanics, under the B.S.E. in mechanical engineering, is designed to teach students the modern computational tools available for solving large-scale and complex technical problems. The curriculum focuses on high-performance computing and the accurate modeling of large- and small-scale systems.
Accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-347-7700.

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.
Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university admission standards. International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer students with 24 or more transferable college credit hours:

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).

Career Opportunities: Mechanical engineers are employed in virtually every kind of industry. They are involved in seeking new knowledge through research; in generating creative design and development; and in the production, control, management and sales of the devices and systems needed by society. Therefore, a major strength of a mechanical engineering education is the flexibility it provides in future employment opportunities for its graduates.
The objectives of the mechanical engineering program are for graduates to be employed in mechanical engineering or a related field or accepted to graduate school and:

- Our graduates will be employed as engineers or will be enrolled in (or have graduated from) engineering or professional graduate school.
- Our graduates will be sought out to contribute to the design of solutions to complex engineering problems.
- Our graduates will demonstrate professionalism and will hold positions of increasing responsibility within their organizations.


## Contact Information:

Engineering, Ira A. Fulton Schools of
Mechanical and Aerospace Engineering Program
http://engineering.asu.edu/macme
ECG 202
macme@asu.edu
480-965-2335

## Mechanical Engineering (Energy \& Environment), BSE (ESMAEEBSE)

Campus: TEMPE
Program Description: The concentration in energy and environment, within the B.S.E. in mechanical engineering, seeks to prepare students to analyze technical problems in:

- Air pollution.
- Climate change.
- Energy efficiency.
- Environmental sustainability.
- Renewable energy.
- Timely issues facing the global community.

Although the primary focus of this program is technical, the general education courses in the areas of the humanities and social and behavioral sciences introduce students to the global, political and societal issues relating to energy and environment. By focusing on issues such as air pollution, water scarcity and the lack of alternative transportation, this program becomes even more attractive for employers in the greater Phoenix area.
Accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-347-7700.

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 265 Calculus for Engineers I.

Admission Requirements: The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university admission standards. International students may have an additional English-language proficiency criterion. Foreign
nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (see http://global.asu.edu/future/undergrad) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.
Freshman Admission:

- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA; or class ranking in top 25 percent of high school class, and
- No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- No high school math or science competency deficiencies, and
- Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25 percent of high school class.

Transfer students with 24 or more transferable college credit hours:

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).

Career Opportunities: Mechanical engineers are employed in virtually every kind of industry. They are involved in:

- Generating creative design and development.
- The production, control, management and sales of the devices and systems needed by society.
- Seeking new knowledge through research.

Therefore, a major strength of a mechanical engineering education is the flexibility it provides in future employment opportunities for its graduates. Students completing this concentration have opportunities as power plant designers, environmental consultants and heating, ventilation and air-conditioning (HVAC) engineers.
The objectives of the mechanical engineering program are for graduates to be employed in mechanical engineering or a related field or accepted to graduate school and:

- Our graduates will be employed as engineers or will be enrolled in (or have graduated from) engineering or professional graduate school.
- Our graduates will be sought out to contribute to the design of solutions to complex engineering problems.
- Our graduates will demonstrate professionalism and will hold positions of increasing responsibility within their organizations.


## Contact Information:

Engineering, Ira A. Fulton Schools of
Mechanical and Aerospace Engineering Program
http://engineering.asu.edu./macme
ECG 202
macme@asu.edu
480-965-2335

## Honors - Barrett, Honors College

## Honors College (9HOHONALL)

## Campus: DTPHX, POLY, TEMPE, WEST

Program Description: Barrett welcomes applications from highly-motivated, high-achieving, academically strong high school seniors and transfer students, as well as students currently enrolled at ASU. Prospective students may apply to Barrett after they have submitted an application to ASU. Admission information and the online application are available on the Barrett website. Barrett students complete a challenging honors curriculum through a combination of:

- Culminating honors thesis or creative project.
- Honors contracts.
- Honors study abroad.
- Honors-only seminars.
- Internships.
- Research.

Generally, students complete 36 hours of honors credits within the 120 credit hours required to earn a bachelor's degree. Details regarding the academic requirements can be viewed using the major map.

## Additional Program Fee: Y.

Second Language Requirement: N.

Admission Requirements: Students who have demonstrated high levels of academic achievement in high school or college may apply for admission to Barrett. All candidates for admission must file an application to Barrett separate from their ASU application and must be admitted to ASU before Barrett can consider their application.
Applicants are evaluated on the basis of:

1. High school GPA (Arizona Board of Regents GPA based on 16 competency courses).
2. High school class rank.
3. Performance on the SAT or ACT.
4. Talents that contribute to leadership and community service.

Continuing ASU or transfer students are evaluated on their college GPA. Please contact Barrett for more information.

## Contact Information:

Barrett, the Honors College
Barrett, the Honors College
http://barretthonors.asu.edu
SGHAL 101
480-965-4033

## Journalism, Walter Cronkite School of

## Journalism \& Mass Communication, BA (CSJMCBA)

Campus: DTPHX

Program Description: The Walter Cronkite School of Journalism and Mass Communication, named in honor of legendary CBS news anchor Walter Cronkite, is one of the largest and most successful professional journalism schools in the country. Students study print and online journalism, broadcast journalism, or strategic media/public relations, leading to a B.A. in journalism and mass communication. The Cronkite school is located at the ASU at the Downtown Phoenix campus, in the heart of the 13th largest media market in the U.S. The school features state-of-the-art computer labs, editing suites, production studios and classrooms dedicated to journalism education.

## Additional Program Fee: Y.

Second Language Requirement: Y.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: The Bachelor of Arts in Journalism and Mass Communication degree program has higher admission requirements. Students should select a second major on the application. Students who are not admitted to the Cronkite School and who did not select a second major, or are not admissible to the second major, are admitted to Exploratory Social and Behavioral Sciences within University College.
Freshman applicants must meet the following standards:

- Have a $3.00(4.00=A)$ ABOR GPA;
- Have no English competency deficiencies; and
- Meet one of the following two requirements, top 25 percent of high school class, or 1040 SAT Reasoning or 22 ACT score.

Transfer students (with 12 or more transfer hours after high school graduation) are required to have a cumulative transfer GPA of 3.00 or higher and no English competency deficiencies. Transfers should contact the school for additional steps after admission to ASU. For more information regarding transfer admission, see http://cronkite.asu.edu/undergrad/xfer_major_change.php.

Career Opportunities: Walter Cronkite School of Journalism and Mass Communication graduates work for newspapers, radio and television stations, online services, magazines, public relations firms and corporate communication divisions. Positions include reporters, editors, photojournalists, writers and media managers.

## Contact Information:

Journalism, Walter Cronkite School of Walter Cronkite School of Journalism \& Mass Comm
http://cronkite.asu.edu
CRONK 302
cronkiteadvising@asu.edu
602-496-5555

Letters and Sciences, School of

## Applied Science (Technical Communication), BAS (LSTECBAS)

## Campus: POLY

Program Description: The B.A.S. is a flexible degree plan designed specifically for students who have earned an A.A.S. from a regionally accredited institution. This major combines the technical experience gained in the student's associate degree program with a broader education of management, leadership, critical thinking and communication skills.
Technical communication is applied workplace communication that makes technical information understandable and available to many audiences. In the technical communication concentration, students learn how to produce, design and manage information using both traditional and developing technologies.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.

Career Opportunities: The Bureau of Labor Statistics estimates the need for writers and editors will increase by 25 percent during the next five years. Software and electronics companies, media corporations, financial institutions, government agencies, nonprofits and other areas will see an increased demand for writers. Students in the program will prepare for careers as:

- Desktop publishers.
- Information designers.
- Multimedia designers.
- Publications managers.
- Technical editors.
- Technical writers.
- Web page and intranet page designers.


## Contact Information:

Letters and Sciences, School of
School of Letters and Sciences
http://sls.asu.edu/
SANCA 230
sls@asu.edu

## Communication, BA (LSCOMBA)

Campus: DTPHX, POLY
Program Description: The B.A. in communication focuses on teaching students how communication processes create, maintain and transform identities, relationships, workplaces and communities. Our mission statement is: Through the study and critique of human communication, we generate knowledge, creativity and understanding to facilitate healthy relationships and workplaces, civil and secure communities, and constructive intercultural interaction.

Additional Program Fee: N.
Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.

## Admission Requirements:

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates of our program often attend leading graduate schools in communication, law schools and business schools, and/or find gainful employment in careers in areas of:

- Campaign management.
- Counseling.
- Criminal justice.
- Entrepreneurism.
- Event planning.
- Health care management.
- Human resource management.
- Intercultural relations.
- Marketing.
- Mediation.
- Nonprofit management.
- Public relations.
- Public service.
- Sales.


## Contact Information:

Letters and Sciences, School of
School of Letters and Sciences
http://sls.asu.edu/
UCNTR 300
sls@asu.edu
602-496-0658

## English, BA (LSENGBA)

Campus: POLY
Program Description: The B.A. in English focuses on effective writing, critical thinking and sophisticated reading of literary and nonliterary texts.

Additional Program Fee: N.
Second Language Requirement: N .
First Required Math Course: MAT 142 College Mathematics.

## Admission Requirements:

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The B.A. in English prepares scholars and teachers for graduate or professional study and for careers in education, writing and other related fields. Career prospects for secondary language arts teachers in Arizona are particularly strong. More importantly, students in the program will develop skills that employers value, such as analyzing ideas and problems, finding and evaluating information, communicating effectively, and presenting clear and logical arguments. With these skills, graduates of the program can find jobs in:

- Creative and technical writing.
- Editing.
- Financial services.
- Government.
- Health care.
- Lobbying.
- Marketing.
- Nonprofit organizations.
- Program management.
- Public relations.
- Reporting.
- Social work.


## Contact Information:

Letters and Sciences, School of
School of Letters and Sciences
http://sls.asu.edu/
SANCA 233
sls@asu.edu
480-727-1526

## General Studies, BGS (LSGNSBGS)

Campus: DTPHX
Program Description: The Bachelor of General Studies offers students a flexible, innovative path to degree completion. Graduates of the program will be informed and effective members of society, who are well-prepared for a changing global marketplace with its diverse cultures. The theme of this degree, offered by the School of Letters and Sciences on the Downtown Phoenix campus, is "Society and the Individual." Students will explore the tensions between individualism and collectivism, the public and private self, and the interplay of culture and identity.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

## Admission Requirements:

Career Opportunities: General studies majors have the option of working in almost any field that requires effective interaction with others, from sales to social services, organizational management to government administration. Graduates will be equipped with transferable skills highly desired by many employers; therefore, a wide array of job choices is available. The B.G.S. creates great flexibility in career choice because of the versatility within the program.
Graduates may choose to enter one of the areas for which their cluster prepares them, including:

- Advertising.
- Corporate communications.
- Government sectors.
- The helping professions.
- Higher education.
- Hospitality.
- Marketing.
- Media.
- Nonprofit administration.
- Sales.
- Tourism.


## Contact Information:

Letters and Sciences, School of
School of Letters and Sciences
http://sls.asu.edu/
UCENT 300
sls@asu.edu
602-496-4000

## History, BA (LSHISBA)

Campus: POLY

Program Description: The B.A. in history focuses on American history, European history, Southwest history, environmental history and related fields.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Cochise College, Maricopa County Community College District.

Career Opportunities: The B.A. in history prepares scholars and teachers for graduate and professional student and careers in education, writing and other related fields. Career prospects for secondary history and social studies teachers in Arizona are particularly strong. Students in the program develop skills in analyzing ideas and problems, finding and evaluating information, communicating effectively, and presenting clear and logical arguments. With these skills, graduates of this program can find jobs in public policy, government, lobbying, social work, program management, museum management, archiving, curating and with nonprofit organizations. The degree also prepares students to continue in graduate and professional programs.

## Contact Information:

Letters and Sciences, School of
School of Letters and Sciences
http://sls.asu.edu/
SANCA 233
sls@asu.edu
480-727-1526

## Interdisciplinary Studies, BIS (LSBISBIS)

Campus: DTPHX, ONLNE, POLY, TEMPE, WEST
Program Description: Interdisciplinary studies is an approach to answering questions, solving problems and addressing contemporary social issues from multiple perspectives. Interdisciplinary students develop the intellectual tools needed to build bridges across academic disciplines and apply their skills, innovations and knowledge in various academic and practical settings. In core classes, students develop a portfolio that showcases each individual's skills, interests and talents. This portfolio and the applied learning experience provide each student with valuable resources for flexible, individualized career planning and development. The B.I.S. program may be completed in-person or online. Working with an academic success specialist, students choose from and combine two of more than 140 concentrations that represent academic interests they wish to integrate. Of these, the following concentrations are available to students attending in-person or online:

- Family and human development.
- Film and media studies.
- History (U.S. or European).
- Justice studies.
- Political science.
- Religious studies.
- Small business.
- Sociology.
- Technical writing.
- Women and gender studies.

A B.I.S. in organizational studies is also available online. For more information, visit http://asuonline.asu.edu/ or e-mail sls@asu.edu.
This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: The B.I.S. program is available to all students in good academic standing who have achieved sophomore, junior or senior standing. Students must complete the online B.I.S. cyber workshop (found online at http://sls.asu.edu/bis/) prior to meeting with an advisor to declare their major as interdisciplinary studies.

Career Opportunities: Because of the flexibility of the B.I.S. degree, graduates leave ASU ready for their next steps in life, whether employment in an entry-level position, promotional opportunities, or for graduate studies in a variety of disciplines. Recent examples include a graduate with biology and chemistry concentrations who is pursuing a master of pharmacy degree, another graduate who combined business and communication and now owns a small business, and another who integrated sociology and family studies to further a career in law enforcement.

## Contact Information:

Letters and Sciences, School of
School of Letters and Sciences
http://sls.asu.edu/
USAB 203
bis@asu.edu
480-965-1970

## Interdisciplinary Studies (Organizational Studies), BIS (LSORGBIS)

Campus: ONLNE
Program Description: The interdisciplinary studies online degree program is an approach to answering questions, solving problems and addressing contemporary social issues from multiple perspectives. Interdisciplinary students develop the intellectual tools needed to build bridges between academic disciplines and apply their skills, innovations and knowledge in various academic and practical settings. The B.I.S. in organizational studies is intended for students seeking an interdisciplinary degree and a desire to learn about the dynamics of contemporary organizations. Via the organizational studies curriculum, students gain valuable knowledge of management styles, communication strategies, technologies, diversity, ethics and politics. All course work for organizational studies is offered online, giving students freedom and flexibility in completing their requirements. By engaging in a breadth of knowledge and experience, and by acquiring the skills to integrate various domains of knowledge, students prepare themselves for careers in:

- Business.
- Government.
- Health care administration.
- Nonprofit agencies.
- Service industry.

Many organizational studies students already have a chosen career field, yet desire a degree that is versatile, flexible, meaningful and affords the opportunity for continued career development and advancement.

Additional Program Fee: N.
Second Language Requirement: N.

## Admission Requirements:

Career Opportunities: Because of the flexibility of the B.I.S. program, graduates leave ASU ready for their next steps in life, whether employment in an entry-level position, promotional opportunities, or for graduate studies in a variety of disciplines. Recent graduates have found opportunities in education, business, health care administration, nonprofit administration, tourism and many other exciting fields.

## Contact Information:

Letters and Sciences, School of
School of Letters and Sciences
http://sls.asu.edu/
UCENT 300
sls@asu.edu
602-496-0356

## Liberal Studies, BLS (LABLSBLS)

## Campus: ONLNE, TEMPE

Program Description: The B.L.S. is an online program that students can complete from anywhere in the world. The B.L.S. is an excellent choice for working adults and can sometimes be completed in as little as one year as a degree completion program. Students in the B.L.S. program are able to design their own transdisciplinary major based on their personal interests. For more information on eligibility requirements, visit the school website.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Career Opportunities: Although a liberal studies major is not professionally or vocationally oriented, the program shares with all other liberal arts and science degrees the goal of developing analytical and communicative abilities. The program offers breadth of learning in an online setting. The liberal studies degree is transdisciplinary, providing the student with a "thematic" approach to his/her education. Liberal studies graduates are prepared to enter the work force or pursue graduate or professional studies at the completion of their undergraduate program.

## Contact Information:

Letters and Sciences, School of
School of Letters and Sciences
http://sls.asu.edu/
SANCA 251F
BLS@asu.edu
480-727-5398

## Science, Technology and Society, BS (ECSTSBS) <br> Campus: POLY

Program Description: Questions surrounding the interaction of science, technology and human systems are highly interdisciplinary and cultural, requiring analytical techniques that transcend space and time. Thus, the science, technology and society program stresses the need to step outside both disciplinary and cultural boxes in pursuit of knowledge. Accordingly, the program is heavy on cultural and information literacy and critical thinking. The primary goal is to produce generalists who understand the intricate interrelationship of science, technology and society, and are armed with the technical skills to change their environment. The following tracks are available:

- Global technology and development and general science.
- Science, technology and governance.
- Technology and society.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: The bachelor's degree in science, technology and society prepares professionals and scholars for careers in the 21st-century world focusing primarily, but not exclusively, on the interaction of science and technology with human systems. The focus of the program is on developing the technical skills required to audit the social, political and policy impact of technological advancement, and the competence required to navigate questions surrounding the future trajectory of science and technology. Graduates are prepared for graduate or professional study, or professional careers in:

- Business.
- Education.
- Government.
- Law.
- Nonprofit organizations.


## Contact Information:

Letters and Sciences, School of
School of Letters and Sciences
http://sls.asu.edu/
SANCA 230
sls@asu.edu
480-727-1526

## Technical Communication, BS (LSTECBS)

Campus: ONLNE, POLY

Program Description: The B.S. in technical communication is the only undergraduate technical communication degree program available in the state of Arizona. Technical communication is applied workplace communication that makes technical information understandable and available to many audiences. In the technical communication program, students learn how to produce, design and manage information using both traditional and developing technologies.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Coconino Community College, Maricopa County Community College District, Yavapai College.

Career Opportunities: The Bureau of Labor Statistics estimates the need for writers and editors will increase by 25 percent during the next five years. Software and electronics companies, media corporations, financial institutions, government agencies, nonprofits and other areas will see an increased demand for writers. Students in the program will prepare for careers as:

- Desktop publishers.
- Information designers.
- Multimedia designers.
- Publications managers.
- Technical editors.
- Technical writers.
- Web page and intranet page designers.


## Contact Information:

Letters and Sciences, School of
School of Letters \& Sciences
http://sls.asu.edu/
SANCA 230
sls@asu.edu
480-727-1526
Liberal Arts and Sciences, College of

## African \& African American Studies, BA (LAAFRBA)

Campus: TEMPE
Program Description: African and African American studies (AAAS) is an interdisciplinary B.A. program that focuses on people of African descent throughout the world and the diversity of past and present experiences of those who live in:

- Africa.
- The Caribbean.
- Central America.
- South America.
- The United States.

As an institutional program, AAAS is structured to:

- Combine knowledge of the African diaspora with intellectual and practical training in specific areas to create more effective communities and global partnerships.
- Prepare students of all ethnicities to better understand, value and more effectively participate in our increasingly diverse society.
- Provide students with a foundation for advanced studies in such fields/professions as history, English, sociology, political science, communications, arts, public administration, law, psychology, social work, education and business.

Additional Program Fee: N.
Second Language Requirement: Y.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Because of its emphasis on various social aspects and groups, AAAS provides students with practical applications useful for various workplaces. The minor requirement of AAAS helps students develop cultural sensitivity and prepares them for careers in:

- Administration.
- Advertising.
- Business.
- Counseling.
- Education.
- Human resources.
- International relations.
- Journalism.
- Justice.
- Management.
- Travel.

Our program prepares students for work in:

- Civil rights organizations.
- Colleges/universities.
- Corporations.
- Government agencies.
- Hotel chains.
- The insurance industry.
- Law firms.
- Libraries.
- Museums.
- Nonprofit organizations.
- The Peace Corps.
- Political action groups.
- Public relation firms.
- Research organizations.
- Sales departments.
- Social service agencies.
- Travel agencies.


## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://aaas.clas.asu.edu/
WILSN 140
aframstu@asu.edu
480-965-4399

## American Indian Studies, BS (LAAISBS)

Campus: TEMPE
Program Description: The B.S. in American Indian studies provides students with unique opportunities to evaluate issues of American Indian nations within a domestic and international context. The B.S. in American Indian studies encompasses two areas of emphasis, 1) legal, policy and community and economic development, and 2) arts, languages and culture. The American Indian Studies Program is committed to broadening the knowledge of students interested in the histories, languages, cultures, arts and contemporary situations of American Indian nations and people. The program is designed to protect the integrity and identity of the indigenous populations of North America and to create a learning environment conducive to critical and creative thought.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: American Indian Studies graduates will be qualified to fill positions at the tribal government, state, federal and private levels. Graduates can advance to graduate school or can pursue professional careers in such fields as government service or public service. For example, federal and tribally operated schools located in remote areas within Indian Country have high turnover rates for both teachers and staff. American Indian Studies graduates should be available to help fill these positions. Furthermore, the federal government, a major employer on many reservations across the country, is in need of qualified people who are knowledgeable of Indian cultures, laws and policies. Additionally, many American Indian nations economies and infrastructures are developing at a rapid pace, and they are in continuous need to fill mid-management and management-level positions.

## Contact Information:

Liberal Arts and Sciences, College of American Indian Studies Program http://americanindian.clas.asu.edu/ DHALL 356
AIS@asu.edu
480-965-3634

## Anthropology, BA (LAASBBA)

## Campus: TEMPE

Program Description: The B.A. program in anthropology gives students an opportunity to learn how and why humans evolved, and how our evolutionary biological, social and cultural trajectories help us understand the meaning of being human in past, present and future environments. Anthropology helps students develop strong critical thinking skills and oral and written expression, important to success in many careers areas.
Anthropology majors learn how to use the scientific method to formulate and test hypotheses and gather qualitative and quantitative data through participant observation, interviewing, ethnographic study, careful excavation and measurement. They also learn how to employ statistics to analyze data and from them extract meaning.
A special feature of the ASU anthropology program is its relevance to other disciplines, and many exciting hands-on learning opportunities through laboratories and field-based courses.

## Additional Program Fee: N.

Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The demand in the job market for people with an anthropology background is stimulated by a growing need for researchers and analysts with keen thinking skills who can manage, evaluate and interpret the large amounts of data on who we are, what we eat, what we wear, what we drive, where we like to live, the health issues that we face, and our impact on the environment. As the many spheres of human interaction expand globally, people trained in anthropology will increasingly be sought for their broad, holistic knowledge and perspective of understanding, which are the hallmarks of anthropology.

## Contact Information:

Liberal Arts and Sciences, College of
School of Human Evolution \& Social Change
http://shesc.asu.edu/undergraduate_studies
SHESC 233
shesc.undergrad@asu.edu
480-965-6215

## Anthropology, BS (LAASBBS)

## Campus: TEMPE

Program Description: The B.S. program in anthropology gives students an opportunity to master anthropological or anthropologically-relevant knowledge and skills through applications of the scientific method and quantitative methodologies. Anthropology is the study of how and why humans evolved, and how our evolutionary biological, social and cultural trajectories help us understand the meaning of being human in past, present and future environments. Through core and elective courses, the B.S. in anthropology program allows students to explore problems that may require the use of theories and methods from diverse disciplines, including biology, global health, applied mathematics, psychology, economics, sociology, medicine, law and engineering. Anthropology provides many exciting, hands-on learning opportunities through laboratories and field-based courses.

## Additional Program Fee: N.

Second Language Requirement: Y .
First Required Math Course: MAT 170 Precalculus.

## Career Opportunities:

- Acting as legal advocates in international cases.
- Analyzing and proposing policies.
- Consulting for large and small private and public organizations.
- Curating cultural resources.
- Directing programs in the private or public sector.
- Directing nonprofit organizations.
- Modeling infectious diseases.
- Planning communities.
- Postgraduate academic research and teaching.
- Professional employment in heritage (cultural resource) management in private or public sectors.
- Providing health care as nurses, doctors or public or global health professionals.


## Contact Information:

Liberal Arts and Sciences, College of
School of Human Evolution \& Social Change
http://shesc.asu.edu/undergraduate_studies
SHESC 233
shesc.undergrad@asu.edu
480-965-6215

## Applied Mathematics for Life and Social Sciences, BS (LAAMLBS)

Campus: TEMPE
Program Description: The B.S. in applied mathematics for the life and social sciences is a challenging and exciting curriculum that investigates and integrates complex areas of the physical, life and social sciences while preparing a new generation of students in mathematics. A primary objective of this program is for students to develop critical thinking skills and purposeful competencies in mathematics, as well as an appreciation for the contributions of mathematics to the fields of sciences, engineering, business, government, economics. Students learn how to use theories and techniques such as mathematical modeling and computational methods to resolve practical real-world problems. The course work is directed towards an understanding of mathematical theory and its relation to other fields of studies. Emphasis is placed on precision of definition, reasoning to accurate conclusions, and analyzing and developing solutions to problems using mathematical principles.

Additional Program Fee: N.
Second Language Requirement: N .
First Required Math Course: MAT 170 Precalculus.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The B.S. in applied mathematics for the life and social sciences provides students entering the environmental, life, health, mathematical and social science fields the quantitative, scientific and analytical skills that are critical, but still lacking for professionals working in these areas.
The need for quantitatively trained scientists and professionals in the life and social sciences is strong in Arizona and the nation. This degree's applied use of mathematics, modeling, statistics and simulation methodologies are in high demand and provide excellent training for future academics and professionals in a broad range of industries, including:

- Astrophysics.
- Biostatistics.
- Chemical engineering.
- Communications.
- Computational biology.
- Computer animation.
- Data mining.
- Demography.
- Digital and medical imaging.
- E-commerce.
- Education.
- Forensics.
- Genomics.
- Informatics/complex systems research.
- Materials science.
- Neuroscience.
- Pharmaceutical engineering.
- Political science.
- Public health.
- Risk management.
- Security/military.
- Social network analysis.


## Contact Information:

Liberal Arts and Sciences, College of
School of Human Evolution \& Social Change
http://shesc.asu.edu/undergraduate_studies
SHESC 233
shesc.undergrad@asu.edu
480-965-6215
Asia Studies (East Asia), BA (LAHSTEABA)
Campus: TEMPE

Program Description: The interdisciplinary B.A. in Asia studies offers students the opportunity to study South Asia, Southeast Asia, or East Asia in depth through a coherent concentration of academic study across a number of disciplines. The interdisciplinary approach will prepare students to deploy a variety of intellectual tools to address contemporary political, social and cultural issues in Asia and to apply their knowledge in various academic and practical settings. Students will identify which concentration (South, Southeast or East Asia) they will pursue.
The concentration in East Asia focuses on:

- China.
- Japan.
- Korea.
- Taiwan.


## Additional Program Fee: N.

Second Language Requirement: $Y$.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: People knowledgeable about Asia will be required in virtually every arena in which America interacts with the rest of the world, including:

- Communication.
- Diplomacy.
- Food security.
- Higher education.
- Humanitarian service.
- Intelligence.
- International organizations.
- Journalism.
- Law.
- Law enforcement.
- Military Studies.
- Philanthropy.
- Technology transfer.
- Tourism.
- Trade.
- Transportation.


## Contact Information:

Liberal Arts and Sciences, College of Historical, Philosophical \& Religious Studies, Sch
http://shprs.clas.asu.edu/asia_studies

## Asia Studies (South Asia), BA (LAHSTSABA)

Campus: TEMPE
Program Description: The interdisciplinary B.A. in Asia studies offers students the opportunity to study South Asia, Southeast Asia, or East Asia in depth through a coherent concentration of academic study across a number of disciplines. The interdisciplinary approach will prepare students to deploy a variety of intellectual tools to address contemporary political, social and cultural issues in Asia and to apply their knowledge in various academic and practical settings. Students will identify which concentration (South, Southeast or East Asia) they will pursue.
The concentration in South Asia focuses on:

- Bangladesh.
- India.
- Pakistan.
- South Asian states and societies.

Additional Program Fee: N.
Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: People knowledgeable about Asia will be required in virtually every arena in which America interacts with the rest of the world, including:

- Communication.
- Diplomacy.
- Food security.
- Higher education.
- Humanitarian service.
- Intelligence.
- International organizations.
- Journalism.
- Law.
- Law enforcement.
- Military studies.
- Philanthropy.
- Technology transfer.
- Tourism.
- Trade.
- Transportation.


## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://shprs.clas.asu.edu/asia_studies
COOR 3307
SHPRSadvising@asu.edu
480-965-8364

Asia Studies (Southeast Asia), BA (LAHSTSEABA)
Campus: TEMPE

Program Description: The interdisciplinary B.A. in Asia studies offers students the opportunity to study South Asia, Southeast Asia, or East Asia in depth through a coherent concentration of academic study across a number of disciplines. The interdisciplinary approach will prepare students to deploy a variety of intellectual tools to address contemporary political, social and cultural issues in Asia and to apply their knowledge in various academic and practical settings. Students will identify which concentration (South, Southeast or East Asia) they will pursue.
The concentration in Southeast Asia focuses on:

- Brunei.
- Burma/Myanmar.
- Cambodia.
- East Timor.
- Indonesia.
- Laos.
- Malaysia.
- The Philippines.
- Singapore.
- Thailand.
- Vietnam.


## Additional Program Fee: N.

## Second Language Requirement: Y.

First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: People knowledgeable about Asia will be required in virtually every arena in which America interacts with the rest of the world, including:

- Communication.
- Diplomacy.
- Food security.
- Higher education.
- Humanitarian service.
- Intelligence.
- International organizations.
- Journalism.
- Law.
- Law enforcement.
- Military studies.
- Philanthropy.
- Technology transfer.
- Tourism.
- Trade.
- Transportation.


## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://shprs.clas.asu.edu/asia_studies
COOR 3307
SHPRSadvising@asu.edu
480-965-8364
Asian Languages - Chinese, BA (LACHIBA)
Campus: TEMPE

Program Description: The B.A. in Asian languages with a concentration in Chinese strives to instill proficiency in reading, writing, and speaking Mandarin and in reading classical Chinese. It provides an in-depth understanding of the fundamentals of the rich Chinese cultural tradition, centered on primary Chinese texts (in both Chinese and English translation) from the literary, intellectual and religious cultures of Chinese-speaking societies. These texts include visual and written materials on, among other things:

- Linguistics.
- Literary theory and history.
- Media.
- Religions.
- Urban culture.

Students in the program have a number of options available for studying abroad, and for students with higher levels of linguistic competency, there are targeted courses (conducted in Chinese) offered as part of the Chinese Flagship track.

Additional Program Fee: N.

## Second Language Requirement: Y .

First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates have a variety of career opportunities. Many work for firms that deal with international trade for U.S. companies that have branches in China or for Chinese companies located either in the U.S. or China. Other graduates work for government agencies or teach (usually English) in China. Yet others pursue graduate work in Chinese studies, eventually teaching the language and/or culture in universities or colleges. Some find employment as K-12 teachers.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
LL 440
silcadvising@asu.edu
480-965-6281
Asian Languages - Japanese, BA (LAJPNBA)
Campus: TEMPE

Program Description: Students in the B.A. in Asian languages with a concentration in Japanese program study the language, literature and culture of Japan. They gain a respectable measure of competence in reading, writing and oral/aural skills in the Japanese language. Students also gain linguistic and cultural competence through the required study of classical Japanese. Throughout the program, students take courses in either Chinese or Korean and related courses in Japanese and East Asian culture on topics such as:

- Art.
- Government.
- Japanese history.
- Linguistics.
- Literary and cultural theory.
- Religion.

In addition, ASU offers summer or yearlong overseas programs to study Japanese.
Additional Program Fee: N.
Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates have a variety of career opportunities. Many work for firms that deal with international trade for U.S. companies that have branches in Japan or for Japanese companies located either in the U.S. or Japan. Other graduates work for government agencies or teach (usually English) in Japan. Some pursue graduate work in Japanese studies, eventually teaching the language and/or culture in universities or colleges. High school and elementary teaching are also possible with certification.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
LL 440
silcadvising@asu.edu
480-965-6281

## Asian Pacific American Studies, BA (LAAPABA)

Campus: TEMPE
Program Description: The B.A. in Asian Pacific American studies (APAS) is an interdisciplinary undergraduate degree focused on demographic, cultural, social, economic and policy issues that have shaped and continue to affect Asian American and Pacific Islander communities in Arizona, the Southwestern U.S., nationally and internationally. Students will study both the historical and contemporary experiences of Asian Americans and Pacific Islanders (AAPI), and gain knowledge about AAPI experiences and communities in Arizona, nationally, and within a larger global context.

Additional Program Fee: N.
Second Language Requirement: Y.
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: Students who complete the B.A. in Asian Pacific American studies may pursue a graduate degree in law, humanities or social sciences. Students will also be prepared to work in positions involving:

- Business.
- Community organizations.
- Creative arts.
- Education.
- Health.
- Immigration.
- Journalism.
- Law.


## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://apas.clas.asu.edu
WILSN 342
apas@asu.edu
480-965-9711

## Biochemistry, BA (LABCHBA)

Campus: TEMPE
Program Description: The B.A. in biochemistry provides students with a course of study in the fundamental knowledge of the chemical substances and vital processes of living organisms. Discoveries of new drugs, the recognition and control of new pathogens, development of new catalysts for energy transformations and the production of new materials, and solutions to problems such as food production and environmental remediation depend upon a thorough grounding in this area of science.

## Additional Program Fee: Y.

Second Language Requirement: $Y$.
First Required Math Course: MAT 251 Calculus for Life Sciences.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: A solid undergraduate education in biochemistry provides the necessary background for career paths in:

- Chemical industries.
- Government.
- Health care.
- Research.
- Teaching and other areas.

Students planning careers in medicine, dentistry, pharmacy or veterinary medicine often study biochemistry with supporting work in biology and chemistry as the route for preprofessional training.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Chemistry and Biochemistry
http://chemistry.asu.edu
PSD 102
chmugadv@asu.edu
480-965-3461

## Biochemistry, BS (LABCHBS)

Campus: TEMPE
Program Description: The B.S. in biochemistry provides students with a course of study in the fundamental knowledge of the chemical substances and vital processes of living organisms. Discoveries of new drugs, the recognition and control of new pathogens, development of new catalysts for energy transformations and the production of new materials, and solutions to problems such as food production and environmental remediation depend upon a thorough grounding in this area of science.

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 270 Calculus w/Analytic Geometry I.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: A solid undergraduate education in biochemistry provides the necessary background for career paths in:

- Chemical industries.
- Government.
- Health care.
- Research.
- Teaching and other areas.

Students planning careers in medicine, dentistry, pharmacy or veterinary medicine often study biochemistry with supporting work in biology and chemistry as the route for preprofessional training.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Chemistry and Biochemistry
http://chemistry.asu.edu
PSD 102
chmugadv@asu.edu
480-965-3461

## Campus: TEMPE

Program Description: The science of biochemistry is about the discovery and dissemination of fundamental knowledge of the chemical substances and vital processes of living organisms. Discoveries of new drugs, the recognition and control of new pathogens, development of new catalysts for energy transformations and the production of new materials, and solutions to problems such as food production and environmental remediation depend upon a thorough grounding in this area of science. The B.S. in biochemistry with a concentration in medicinal chemistry emphasizes aspects of biochemistry that will be useful to those planning careers in medically related areas.

Additional Program Fee: Y.
Second Language Requirement: N.
First Required Math Course: MAT 270 Calculus w/Analytic Geometry I.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: A solid undergraduate education in biochemistry provides the necessary background for career paths in:

- Chemical industries.
- Government.
- Health care.
- Research.
- Teaching and other areas.

Students planning careers in medicine, dentistry, pharmacy or veterinary medicine often pursue the medicinal chemistry concentration, with supporting work in biology and chemistry as the route for preprofessional training.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Chemistry and Biochemistry
http://chemistry.asu.edu
PSD 102
chmugadv@asu.edu
480-965-3461

## Biological Sciences, BS (LABSCBS)

Campus: TEMPE
Program Description: The B.S. in biological sciences is designed for students who desire a broad background in many areas of biology, as preparation for professional school, or who want to postpone selection of a concentration until graduate school. The major provides students with a rigorous academic curriculum to develop the knowledge and skills to prepare for:

- Dental.
- Graduate school.
- Medical.
- Optometry.
- Other health professional schools.
- Physician assistant.
- Veterinary.

Biological sciences encompasses the study of all living things (e.g., microbes, plants and animals) and includes the study of:

- Basic organization and function (e.g., molecules, cells, tissues, organs).
- Development of biotechnology.
- How organisms evolve, their roles in the natural environment, and how hereditary information is transferred.

Additional Program Fee: Y.
Second Language Requirement: N.

First Required Math Course: MAT 170 Precalculus.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Central Arizona College, Cochise College, Maricopa County Community College District, Yavapai College.

Career Opportunities: Students graduating with this degree are broadly trained and well prepared for admission into graduate programs and professional schools (medical, dental and veterinary). They may also directly enter positions in government, education, industry or certain technical fields.
Students exploring becoming a middle or high school teacher can find more information about the concurrent degree program at: http://catalog.asu.edu/concurrent_dual.

## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/
LSC 206
sols.advising@asu.edu
480-727-6277

## Biological Sciences (Animal Physiology \& Behavior), BS (LABSCABS)

Campus: TEMPE
Program Description: The animal physiology and behavior concentration in the B.S. in biological sciences is intended for students interested in a broad, integrated education in the principles and mechanisms governing animal function and behavior. This concentration will prepare students for:

- Careers in basic and biomedically oriented research.
- Graduate-level study in physiology, neuroscience and animal behavior.
- Professional school in health professions (e.g., medical, physician assistant, veterinary, dental, optometry or other health professional school).

The requirements include upper division courses in the related fields of:

- Behavior.
- Neuroscience.
- Physiology.

Electives are designed to provide flexibility and ensure exposure to multiple levels of analysis.

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Students graduating with this degree are broadly trained and well prepared for admission into graduate programs and professional schools (e.g., medical, dental and veterinary). They may also directly enter positions in:

- Certain technical fields.
- Education.
- Government.
- Industry.


## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/

## Biological Sciences (Biology \& Society), BS (LABSCSBS)

Campus: TEMPE
Program Description: The biology and society concentration in the B.S. in biological sciences is designed to provide students with a working knowledge of life sciences and related sciences. Students gain the historical, philosophical, political and bioethical perspectives needed to explore interactions between the life sciences and related complex human issues. Subsequently, the program contributes to better-informed and more effective policymakers, teachers, writers and researchers in areas related to biology, medicine and society.
To achieve this, the curriculum is highly individualized including an independent research project. As a result, students have skills in:

- Analysis of ideas.
- Communication of ideas.
- Critical thinking.
- Grounding in the full range of sciences and statistics.
- Research.
- Writing.

This makes majors eligible for a broad range of different career options. Most majors have chosen to pursue graduate or professional degrees attending medical, law, public health and a range of graduate programs.

Additional Program Fee: Y.
Second Language Requirement: N.
First Required Math Course: MAT 251 Calculus for Life Sciences.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Our students have pursued diverse career paths. They have gone on to medical school, public health, law, environmental studies and graduate programs in such diverse areas as:

- Counseling psychology.
- Genetic.
- Genetic counseling.
- Health policy.
- History and philosophy of science.
- International disease studies and prevention.


## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/
LSC 206
sols.advising@asu.edu
480-727-6277

## Biological Sciences (Conservation Biology and Ecology), BS (LABSCCBS)

Campus: TEMPE

Program Description: The conservation biology and ecology concentration in the B.S. in biological sciences is designed to provide students with a broad background in conservation biology and ecology, while allowing them to specialize in a particular area of interest. The concentration provides for training in:

- Behavioral ecology.
- Climate change.
- Conservation of endangered species.
- Population biology.
- Social and historical aspects of conservation.
- Urban ecology.

Conservation biology is the multidisciplinary science of conserving biological diversity. Biological diversity (biodiversity) is the totality of genes, species and ecosystems in a region, and this wealth of life on Earth is the product of millions of years of evolutionary history. Present threats to biodiversity are unprecedented, and biodiversity loss represents a concern for all of humanity. Conservation biologists investigate the impact of humans on the Earth's biodiversity, and develop practical approaches to prevent the extinction of species and promote the sustainable use of biological resources.

Additional Program Fee: Y.
Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Students graduating with this degree are broadly trained and well prepared for admission into graduate programs and veterinary school. They may also directly enter positions in:

- Education.
- Government.
- Industry.
- Nongovernmental organizations.
- Technical fields.


## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/
LSC 206
sols.advising@asu.edu
480-727-6277

## Biological Sciences (Genetics, Cell \& Developmental Biology), BS (LABSCGBS)

Campus: TEMPE

Program Description: The genetics, cell and developmental biology concentration in the B.S. in biological sciences is intended for students interested in a flexible curriculum focused on the related fields of genetics, cell biology and developmental biology. This concentration will prepare students for careers in basic and biomedically oriented research or postbaccalaureate education. The major provides students with a rigorous academic curriculum to develop the knowledge and skills to prepare for:

- Dental.
- Graduate school.
- Medical.
- Optometry.
- Other health professional schools.
- Physician assistant.
- Veterinary.

The requirements include upper division courses in 1) genetics, cell, and developmental biology, and 2) the subdiscipline of comparative genomics. Elective courses permit students to further focus their education in one or more of these areas.

Additional Program Fee: Y.
Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Students graduating with this degree are well prepared for admission into graduate programs and professional schools (e.g., medical, dental and veterinary). They may also directly enter positions in:

- Education.
- Government.
- Industry.
- Technical fields.


## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/
LSC 206
sols.advising@asu.edu
480-727-6277

## Chemistry, BA (LACHMBA)

## Campus: TEMPE

Program Description: Chemistry is a central science that connects the "hard sciences," including physics, with the "soft sciences," such as biology and medicine, and provides fundamental knowledge needed to deal with many needs of society. Discoveries of new materials, processes and solutions to problems such as pollution control depend upon a thorough grounding in this area of science. Students in the B.A. in chemistry program have opportunities to explore interests in analytical, inorganic, organic and physical chemistry as well as biochemistry, geochemistry, solid-state and materials chemistry. A secondary education B.A. with a specialization in chemistry is also available.

Additional Program Fee: Y.
Second Language Requirement: $Y$.
First Required Math Course: MAT 270 Calculus w/Analytic Geometry I.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: A solid undergraduate education in chemistry provides the necessary background for many career paths in chemical industries, government and other areas. Chemistry can be combined with law for patent work, economics for sales and marketing careers, and computer science for careers in information storage and retrieval. Students planning careers in medicine, dentistry or veterinary medicine often pursue a course of study in chemistry with supporting work in biology as the route for preprofessional training.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Chemistry and Biochemistry
http://chemistry.asu.edu
PSD 102
chmugadv@asu.edu
480-965-3461

## Chemistry, BS (LACHMBS)

## Campus: TEMPE

Program Description: Chemistry is a central science that connects the "hard sciences," including physics, with the "soft sciences," such as biology and medicine, and provides fundamental knowledge needed to deal with many needs of society. Discoveries of new materials, processes and solutions to problems such as pollution control depend upon a thorough grounding in this area of science. Students in the B.S. in chemistry program have opportunities to explore interests in analytical, inorganic, organic and physical
chemistry as well as biochemistry, geochemistry, solid-state and materials chemistry. A secondary education B.A. with a specialization in chemistry is also available.

## Additional Program Fee: Y.

Second Language Requirement: N .
First Required Math Course: MAT 270 Calculus w/Analytic Geometry I.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: A solid undergraduate program of education in chemistry provides the necessary background for many career paths in chemical industries, government and other areas. Chemistry can be combined with law for patent work, economics for sales and marketing careers, and computer science for careers in information storage and retrieval. Students planning careers in medicine, dentistry or veterinary medicine often pursue a course of study in chemistry with supporting work in biology as the route for preprofessional training.
Students exploring becoming a middle or high school teacher can find more information about the concurrent degree program at http://catalog.asu.edu/concurrent_dual.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Chemistry and Biochemistry
http://chemistry.asu.edu
PSD 102
chmugadv@asu.edu
480-965-3461

## Chemistry (Environmental Chemistry), BS (LACHMEBS)

## Campus: TEMPE

Program Description: Chemistry is a central science that connects the "hard sciences," including physics, with the "soft sciences," such as biology and medicine, and provides fundamental knowledge needed to deal with many needs of society. Discoveries of new materials, processes and solutions to problems such as pollution control depend upon a thorough grounding in this area of science. Students in the B.S. in chemistry program have opportunities to explore interests in analytical, inorganic, organic and physical chemistry as well as biochemistry, geochemistry, solid-state and materials chemistry. The environmental chemistry concentration is especially appropriate for those with strong interests in solving environmental problems.

## Additional Program Fee: Y.

Second Language Requirement: $N$.
First Required Math Course: MAT 270 Calculus w/Analytic Geometry I.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: A solid undergraduate program of education in chemistry provides the necessary background for many career paths in chemical industries, government and other areas. Chemistry can be combined with law for patent work, economics for sales and marketing careers, and computer science for careers in information storage and retrieval. Students planning careers in medicine, dentistry or veterinary medicine often pursue a course of study in chemistry with supporting work in biology as the route for preprofessional training. Students planning to work in environmentally related areas will find the environmental chemistry concentration especially appropriate.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Chemistry and Biochemistry
http://chemistry.asu.edu
PSD 102
chmugadv@asu.edu
480-965-3461

## Communication, BA (LACOMBA)

## Campus: TEMPE

Program Description: The B.A. in communication focuses on teaching students how communication processes create, maintain and transform identities, relationships, workplaces and communities. Our mission statement is: Through the study and critique of human communication, we generate knowledge, creativity and understanding to facilitate healthy relationships and workplaces, civil and secure communities, and constructive intercultural interaction.

## Additional Program Fee: N.

Second Language Requirement: Y.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates of our program often attend leading graduate schools in communication, law schools and business schools, and/or find gainful employment in careers in the areas of:

- Campaign management.
- Counseling.
- Entrepreneurism.
- Event planning.
- Health care management.
- Human resource management.
- Intercultural relations.
- Marketing.
- Nonprofit management.
- Public relations.
- Sales.


## Contact Information:

Liberal Arts and Sciences, College of
Hugh Downs School of Human Communication
http://humancommunication.clas.asu.edu/
STAUF 412
communication@asu.edu
480-965-5095

## Communication, BS (LACOMBS)

Campus: ONLNE, TEMPE
Program Description: The B.S. in communication program focuses on teaching students how communication processes create, maintain and transform identities, relationships, workplaces and communities. Our mission statement is: Through the study and critique of human communication, we generate knowledge, creativity and understanding to facilitate healthy relationships and workplaces, civil and secure communities and constructive intercultural interaction.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates of our program often attend leading graduate schools in communication, law schools and business schools, and/or find gainful employment in careers in the areas of:

- Campaign management.
- Counseling.
- Entrepreneurism.
- Event planning.
- Health care management.
- Human resource management.
- Intercultural relations.
- Marketing.
- Nonprofit management.
- Public relations.
- Sales.


## Contact Information:

Liberal Arts and Sciences, College of Hugh Downs School of Human Communication http://humancommunication.clas.asu.edu/
STAUF 412
communication@asu.edu
480-965-5095

## Computational Mathematical Sciences, BS (LACMSBS)

## Campus: TEMPE

Program Description: Mathematics is a crucial component in many disciplines such as physics, engineering applications, business, economics, and in the life sciences and social sciences. The B.S. in computational mathematical sciences is an interdisciplinary degree, with components in mathematics, science and computing, and a focus on computational and numerical aspects of techniques used to solve a wide range of applied problems arising in practically any field of study.
A large component is geared towards understanding why and how computer algorithms work, as well as their limitations in terms of applicability and efficiency. This program is designed for students interested in computing and simulation of applied problems. It promotes creative skills and develops problem-solving tools needed in today's technological world.

Additional Program Fee: Y.
Second Language Requirement: N.
First Required Math Course: MAT 270 Calculus w/Analytic Geometry I.
Career Opportunities: Employment opportunities for math majors can be found in virtually all sectors of industry:

- Academia (e.g., high-school or college teacher, university professor).
- Applied math (scientific computing).
- Biotechnology.
- Business (actuary for bank or insurance company, operations research).
- Computer.
- Engineering.
- Government (consultant, federal and state organizations).
- Graduate school (mathematics or other fields).
- Medicine.

A B.S. in computational mathematical sciences is perhaps the most versatile of all math degrees in that it can lead to a wider choice of career paths. Many careers require a command of quantitative methods; persons qualified in mathematics hold a favorable edge in competition for job opportunities. Profiles and descriptions of jobs and career paths of actual mathematicians in a wide array of fields are published by the American Mathematical Society.

## Contact Information:

Liberal Arts and Sciences, College of
School of Mathematical and Statistical Sciences
http://math.asu.edu/
PSA 211
math@asu.edu
480-965-7195

## Earth and Environmental Studies, BA (LAEESBA)

## Campus: TEMPE

Program Description: The B.A. in earth and environmental studies will provide a foundational understanding of the evolution of the Earth system with an emphasis on the planetary context for sustainable human societies. The degree includes broad training in the physical sciences, especially process-oriented geosciences that focus on Earth's life-sustaining surface environment. Advanced courses focus on topics including:

- Climate change.
- Earth's water, energy and material resources.
- Impacts of land-use change on human civilization.
- Physical, chemical and biological process interactions that define Earth's evolution.

The degree is designed as a liberal arts program with an emphasis on basic scientific literacy, not as a preparatory degree for graduate study in natural science. However, successful graduates will be prepared well for "green" professional careers in fields such as:

- Education.
- Environmental consulting.
- Environmental reporting.
- Natural resource management.
- Public planning.

Additional Program Fee: Y.
Second Language Requirement: $Y$.
First Required Math Course: MAT 117 College Algebra.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Coconino Community College.

Career Opportunities: School of Earth and Space Exploration earth and environmental studies graduates are prepared for positions in:

- Consultancy.
- Governmental agencies.
- Industry.
- Nongovernmental organizations.
- Nonprofit organizations.
- Regulatory agencies.
- Utilities.

They are also well prepared for admission to strong professional schools. Recent environmental awareness in business and government has created new employment opportunities (e.g., environmental coordinators, directors and managers). By developing a breadth of knowledge and experience, and by acquiring the skills to integrate various domains of knowledge, earth and environmental studies students prepare themselves for a variety of careers to help find solutions to tomorrow's environmental and sustainability challenges.

## Contact Information:

Liberal Arts and Sciences, College of
School of Earth and Space Exploration
http://sese.asu.edu
PSF 686
seseinfo@asu.edu
480-965-2213

## Earth \& Space Exploration, BS (LASESBS)

Campus: TEMPE

Program Description: The B.S. in earth and space exploration offers students an integrated education across earth sciences, planetary sciences, astrophysics and engineering. The degree incorporates:

- A learning community that includes both science and engineering students.
- Strong quantitative preparation.
- A yearlong collaborative capstone senior exploration project.

This strong foundation in geosciences, astrophysics and exploration engineering will prepare students for key roles in:

- Earth resources and exploration.
- Environmental and geologic engineering.
- Space research and industry.
- Water and environmental use policy.


## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The earth and space exploration major addresses critical future shortfalls in the national and regional training of the next generation of geoscientists and aerospace engineers. Arizona has an expanding space industry with major new investments and is prepared to engage new technologies to monitor and understand environmental issues in Arizona, the southwest and throughout the world. Students who major in earth and space exploration will have the tools, knowledge and understanding to address key problems of a global nature, whether they are working in the private or public sector.

## Contact Information:

Liberal Arts and Sciences, College of
School of Earth and Space Exploration
http://sese.asu.edu
PSF 686
seseinfo@asu.edu
480-965-5081

## Earth and Space Exploration (Astrobiology and Biogeosciences), BS (LASESABBS)

Campus: TEMPE

Program Description: Astrobiology is the study of the origins, evolution, distribution and future of life in the universe.
Biogeosciences focuses on the interaction of biological and geological processes on Earth at present and in the geologic past. These topics are closely related because the concepts of biogeoscience inform the study of planetary habitability and the search for habitable worlds. Therefore, the astrobiology and biogeoscience concentration is designed to offer students a strong foundation for exploring the interaction of geological and biological processes, how such interactions sustain life on Earth, and how they might operate on other planets. This scientific background is needed to contribute to the search for life on other planets as well as the exploration of extreme environments here on Earth. It also provides training in the interplay of forces that impact global change.

## Additional Program Fee: Y.

Second Language Requirement: Y .
First Required Math Course: MAT 170 Precalculus.
Career Opportunities: Students in the astrobiology program will be well prepared for graduate studies in this field. Because astrobiology is increasingly the motivation for NASA exploration missions, they will also be well suited for entry-level careers at NASA research centers. The degree also provides broad training across a range of science fields, giving students a strong background for careers in biomedical, environmental or sustainability areas.

## Contact Information:

Liberal Arts and Sciences, College of School of Earth and Space Exploration
http://sese.asu.edu
PSF 686
seseinfo@asu.edu
480-965-5081

## Earth and Space Exploration (Astrophysics), BS (LASESABS)

Campus: TEMPE
Program Description: The B.S. in earth and space exploration with a concentration in astrophysics is designed to offer students a fundamental grounding in astronomy and astrophysics, with exposure to the related fields of geology, planetary science and engineering. Students will emerge from this program with the skills to pursue a career in astrophysics, physics or related fields. The rigorous course work includes a combination of physics courses taught in the School of Earth and Space Exploration and the Department of Physics. Students should emerge from the program with the ability to compete at the national level on standardized physics exams. The tools of astronomical discovery are increasingly dependent on technological advances, and students will be exposed to engineering principles. Through the capstone project in the senior year, students will gain valuable experience in translating science drivers into engineering specifics.

## Additional Program Fee: Y.

Second Language Requirement: Y.
First Required Math Course: MAT 265 Calculus for Engineers I.

Career Opportunities: Some of the listed careers may require advanced degrees or additional certifications. Career opportunities include but are not limited to:

- Aerospace engineer.
- Astrobiologist.
- Astronomer.
- Computer programmer.
- Data analyst.
- Graduate student.
- Instrumentation specialist.
- Planetary scientist.
- Science policy intern.
- Science writer.
- Teacher.
- Telescope operator.


## Career settings include:

- Federal government.
- K-12 schools.
- Manufacturing.
- Museums.
- NASA facilities.
- National laboratories.
- NSF facilities.
- Observatories.
- Planetariums.
- Publishing.
- Space industries.
- Universities/colleges.


## Contact Information:

Liberal Arts and Sciences, College of School of Earth and Space Exploration
http://sese.asu.edu
PSF 686
seseinfo@asu.edu

## Earth and Space Exploration (Exploration Systems Design), BS (LASESESDBS)

## Campus: TEMPE

Program Description: The exploration system design concentration is designed to offer students a fundamental grounding in geology, physics and astrophysics, while providing the tools to enable them to design and build hardware and software to achieve specified scientific goals.
At the heart of the program is a sound grounding in the fundamentals of physics, mathematics and chemistry. Upon that foundation we explicitly tackle issues concerning hardware design, instrument assembly and ultimately how to knit these components together when conceiving the requirements needed for a mission or project destined for space or another planet.
As part of this degree, each student will have the opportunity to learn about how projects and missions are designed and planned, starting with the scientific drivers and from there defining engineering specifications. Each student will be expected to complete a senior project that takes a desired scientific measurement and realizes the technological solution to achieve the observation.

## Additional Program Fee: Y.

Second Language Requirement: Y .
First Required Math Course: MAT 265 Calculus for Engineers I.

Career Opportunities: Some of the listed careers may require advanced degrees or additional certifications. Career opportunities include but are not limited to:

- Astronomer.
- Geoscientist.
- Graduate student.
- Planetary scientist.
- Scientific instrumentation specialist.
- Science policy intern.
- Science writer.
- Space systems engineer.
- Systems engineer.

Sample career settings include:

- Aerospace industry.
- Federal government.
- Manufacturing.
- NASA centers.
- National laboratories.
- Observatories.
- Publishers.
- Space industries.
- Universities/colleges.


## Contact Information:

Liberal Arts and Sciences, College of
School of Earth and Space Exploration
http://sese.asu.edu
PSF 686
seseinfo@asu.edu
480-965-5081

## Earth and Space Exploration (Geological Sciences), BS (LASESGSBS)

Campus: TEMPE
Program Description: Geological science is the study of the Earth and other planets with emphasis on the processes that have shaped them since the origin of the solar system, including the co-evolution of life, oceans, atmosphere and the Earth's climate system, and the record of that evolution encoded in rocks, soil, ice and isotopes. The B.S. in earth and space exploration with a
concentration in geological sciences educates students in the fundamentals of the geological sciences, providing a solid background in chemistry, mathematics and physics, as well as interdisciplinary training in engineering, astronomy and planetary science. Students will gain a strong understanding of field methods as well as modern computing, remote sensing and instrumentation, in order to effectively study the natural environment and Earth's resources. Graduates of the program will learn to apply their knowledge for the benefit of the nation, Arizona and society in general.

## Additional Program Fee: Y.

Second Language Requirement: $Y$.
First Required Math Course: MAT 170 Precalculus.
Career Opportunities: Some of the listed careers may require advanced degrees or additional certifications. Sample careers include:

- Environmental geologist.
- Geological engineer.
- Geologist.
- Graduate student.
- Mining geologist.
- Petroleum geologist.
- Science policy intern.
- Science writer.

Sample career settings include:

- Environmental industry.
- Geotechnical industry.
- Mining and petroleum.
- Museums.
- Publishers.


## Contact Information:

Liberal Arts and Sciences, College of
School of Earth and Space Exploration
http://sese.asu.edu
PSF 686
seseinfo@asu.edu
480-965-5081

## Economics, BS (LAECNBS)

Campus: TEMPE
Program Description: The program requires a strong core of economic theory, supplemented by mathematics and data analysis. Students in our B.S. program choose from a variety of electives within the department, as well as in the College of Liberal Arts and Sciences and the university. All students are encouraged to develop programs of study tailored to their individual needs and interests. The department's undergraduate program aims to provide students with the critical thinking and communication skills needed to succeed in business or graduate school. The mission of the Department of Economics at ASU is to provide the highest quality instruction to our students, conduct cutting-edge research in economics, and provide leadership and service to our professional communities.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Students who have sought careers following their undergraduate education have been very successful in:

- Business.
- Consulting.
- Government.

Our graduates have taken positions as:

- Consultants who serve as advisors to both state and federal governments as well as private corporations.
- Corporate economists who collect data and make forecasts concerning the nature of the firm's business.
- Economic analysts for banks and financial firms.

Others have gone on to the best law schools in the country, or to the top Ph.D. and M.B.A. programs here and abroad. Finally, many of our graduates have won prestigious national awards, such as the Marshall Award, the NSF Fellowship, Fulbright fellowships and the Truman Award.

## Contact Information:

Liberal Arts and Sciences, College of
Economics Program in CLAS
http://wpcarey.asu.edu/ecn
BAC 659
wpcareyecn@asu.edu
480-965-3531

## English (Creative Writing), BA (LAENGCBA)

Campus: TEMPE
Program Description: The B.A. in English offers concentrations in creative writing, linguistics or literature. Students in the creative writing concentration study and practice the art of writing poetry and fiction. The faculty in the Department of English offer courses in:

- Comparative literature.
- Creative writing.
- English as a second language
- English education.
- English linguistics, literature and language.
- Rhetoric and composition.

Students engage in community outreach and in such diverse cross-disciplinary offerings as discourses of cultural encounters, borderlands, intercultural studies and technologies. A secondary education B.A. with a specialization in English is also available.

## Additional Program Fee: N.

## Second Language Requirement: Y .

First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: With a degree in English, students' career options are virtually endless. Employers in all fields are always looking for workers with strong writing and communication skills and the ability to think critically. Some of the most common professions for English majors are:

- Business.
- Editing.
- Journalism.
- Law.
- Medicine.
- Nonprofit community service.
- Professional writing.
- Public relations.
- Publishing.
- Teaching.
- Web content development.


## Contact Information:

Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/
LL 542
englishadvising@asu.edu
480-965-3168

## English (Linguistics), BA (LAENGNBA)

Campus: TEMPE
Program Description: The B.A. in English offers concentrations in creative writing, linguistics or literature. Students in the linguistics concentration focus on study of the history and structure of language. The faculty in the Department of English offer courses in:

- Comparative literature.
- Creative writing.
- English as a second language.
- English education.
- English linguistics, literature and language.
- Rhetoric and composition.

Students engage in community outreach and in such diverse cross-disciplinary offerings as discourses of cultural encounters, borderlands, intercultural studies and technologies. A secondary education B.A. with a specialization in English is also available.

Additional Program Fee: N.
Second Language Requirement: $Y$.
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: With a degree in English, students' career options are virtually endless. Employers in all fields are always looking for workers with strong writing and communication skills and the ability to think critically. Some of the most common professions for English majors are:

- Business.
- Journalism.
- Law.
- Medicine.
- Nonprofit community service.
- Professional writing and editing.
- Public relations.
- Publishing.
- Teaching.
- Web content development.


## Contact Information:

Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/
LL 542
englishadvising@asu.edu
480-965-3168

## English (Literature), BA (LAENGTBA)

Program Description: The B.A. in English offers concentrations in creative writing, linguistics or literature. Students in the literature concentration study British, American and global literatures in English from the earliest writings to the present. The faculty in the Department of English offer courses in:

- Comparative literature.
- Creative writing.
- English as a second language.
- English education.
- English linguistics, literature and language.
- Rhetoric and composition.

Students engage in community outreach and in such diverse cross-disciplinary offerings as discourses of cultural encounters, borderlands, intercultural studies and technologies. A secondary education B.A. with a specialization in English is also available.

## Additional Program Fee: N.

Second Language Requirement: Y.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: With a degree in English, students' career options are virtually endless. Employers in all fields are always looking for workers with strong writing and communication skills and the ability to think critically. Some of the most common professions for English majors are:

- Business.
- Journalism.
- Law.
- Medicine.
- Nonprofit community service.
- Professional writing and editing.
- Public relations.
- Publishing.
- Teaching.
- Web content development.


## Contact Information:

Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/
LL 542
englishadvising@asu.edu
480-965-3168

## Family \& Human Development, BS (LAFASBS)

Campus: ONLNE, TEMPE

Program Description: The B.S. in family and human development offers course work on the development of individuals and families as they relate to their social worlds. The required concentration in family studies and child development provides a focus on the development of children, adults and families. Students take a wide variety of courses on contemporary issues related to human development from infancy through the end of the life span, and the development, formation and dissolution of families and develop proficiency in written communication, computer skills, statistics and research methods.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District, Yavapai College.

Career Opportunities: As a liberal arts degree, the B.S. in family and human development not only provides excellent preparation for future graduate work in family and developmental sciences, social work, law, medicine and counseling, it also prepares undergraduates for direct entry into positions in business, social service and government.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social and Family Dynamics
http://ssfd.clas.asu.edu/
SS 144
email@ssfd.info
480-965-6978

## Film (Film \& Media Studies), BA (LAFMSBA)

Campus: ONLNE, TEMPE
Program Description: The B.A. in film with a concentration in film and media studies provides students with an opportunity for interdisciplinary study of film and media. The core faculty are nationally and internationally recognized scholars, with terminal degrees from the nation's top film and media programs. Their innovative curriculum focuses on teaching students to understand how film, television, video and computer games, new media and entertainment culture represent and influence our society. Students interested in the B.A. in film in the College of Liberal Arts and Sciences complete a concentration in film and media studies, and students accepted into the B.A. in film in the Herberger Institute for Design and the Arts complete a concentration in film and media production. The concentrations include core courses and electives in the areas of critical studies and film production.

Additional Program Fee: $N$.
Second Language Requirement: $Y$.
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: The film and media studies concentration provides undergraduates with skills that can be applied in a number of professional fields. It prepares students for a variety of career opportunities as leaders within the media entertainment industries, including:

- Creative management.
- Critics.
- Development.
- Marketing and regulation.
- Teachers.

Former students of film and media studies have gone on to pursue graduate studies at other pretigious universities. Others have selected career paths in the film, media and entertainment industries.

## Contact Information:

Liberal Arts and Sciences, College of
Department of English
http://film.asu.edu/major
LL 641
filminfo@asu.edu
480-965-6747

## French, BA (LAFREBA)

Campus: TEMPE
Program Description: Students in the B.A. in French program study the language, literature and culture of France and Francophone countries. They gain a respectable measure of competence in reading, writing and oral/aural skills in the French language. They are required to take a number of related courses on topics such as:

- Art.
- Cultural theory.
- French history.
- Government.
- International business.
- Linguistics
- Literary theory.
- Religion.

To help students gain proficiency in the language, the French section has an active French Club, conversation hours and film screenings. In addition, ASU also offers study abroad and exchange programs in France and Quebec, Canada, during the summer and academic year.

Additional Program Fee: N.

## Second Language Requirement: $Y$.

First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates have a variety of career opportunities in:

- Airlines.
- Education or government service.
- International trade firms.
- U.S. companies that have branches in France.

Many pursue graduate work in French, eventually teaching the language and culture in universities or colleges. With state certification, high school teaching is also a possibility.

## Contact Information:

Liberal Arts and Sciences, College of School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
LL 440
silcadvising@asu.edu
480-965-6281

## Geography, BA (LAGCUBA)

## Campus: TEMPE

Program Description: Geographers have a unique spatial perspective in understanding the modern world, global to local, through the twin lenses of space and place. The B.A. in geography emphasizes humanistic and cultural traditions, and students pursuing undergraduate studies in geography typically concentrate knowledge-building in understanding various cultural phenomena, or in studying regions such as:

- Asia.
- Africa.
- Europe.
- Latin America.

Additional Program Fee: N.
Second Language Requirement: $Y$.
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

## Career Opportunities: B.A. geographers go on to careers as:

- Community developers.
- Foreign service.
- Geodemographic analysts.
- Governmental organizations.
- Intelligence analysts.
- International trade consultants.
- Nongovernmental organizations.
- Public sector transportation planners.
- Teachers.
- Urban and regional planners.


## Contact Information:

Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/
COOR 5673
geoplan@asu.edu
480-965-7533

## Geography, BS (LAGCUBS)

Campus: TEMPE

Program Description: Geographers have a unique spatial perspective in understanding the modern world, global to local, through the twin lenses of space and place. A B.S. in geography emphasizes spatial patterns in natural science features such as:

- Landforms.
- Plants.
- Water.
- Weather.

Or in social science/environmental science dynamics involving:

- Economic patterns.
- Human populations.
- Transportation.


## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: With a focus on geospatial techniques, B.S. geographers go on to careers as:

- Cartographers.
- Computer cartographers.
- Environment impact analysts.
- Geographic information system (GIS) specialists and analysts.
- Geospatial software developers.
- Hydrology and water resource specialists.
- Location analysts for businesses.
- Remote sensing analysts.

Graduates are presented with a host of other geospatial career options in the burgeoning fields of geographic information science (GISci), mapping and navigation systems.

## Contact Information:

Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/
COOR 5673
geoplan@asu.edu
480-965-7533

## Geography (Meteorology-Climatology), BS (LAGCUMBS)

Campus: TEMPE

Program Description: The meteorology-climatology concentration under the B.S. in geography is designed to meet the requirements of certification as a meteorologist by the National Weather Service. As such, it requires a heavy concentration on:

- Dynamic meteorology (atmospheric physics).
- Mathematics (requiring three semesters of calculus).
- Physics (two semesters of university or calculus-based physics).
- Synoptic meteorology (operational weather forecasting).


## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Students successfully completing the program have found employment with:

- Energy power companies (e.g., Salt River Project and Arizona Public Service).
- Government agencies (e.g., Arizona Department of Environmental Quality, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers).
- Graduate work in either meteorology or climatology.
- National Weather Service.
- U.S. Air Force (in either meteorology or pilot training).


## Contact Information:

Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/
COOR 5673
geoplan@asu.edu
480-965-7533

## Geography (Urban Studies), BS (LAGCUUBS)

## Campus: TEMPE

Program Description: The urban studies concentration under the B.S. in geography is designed to facilitate the growing interest in urban areas, with special emphasis on studying the Phoenix metropolitan area and other rapidly urbanizing regions in arid climates. Tied with geographic information systems (GIS), the urban studies major brings both knowledge and skill sets together in a powerful way. This program, with its focus on GIS, is a viable alternative to the urban planning degree, which has restrictive enrollment.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Students successfully completing the program often find employment with city planning agencies, as well as government agencies at various levels (e.g., county, state, federal). The urban studies major, especially when combined with a focus on GIS, gives graduates an advantage in careers in urban planning and other jobs dealing with urban issues, including:

- Economic development planning.
- Housing issues.
- Transportation.


## Contact Information:

Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/
COOR 5673
geoplan@asu.edu
480-965-7533

## German, BA (LAGERBA)

## Campus: TEMPE

Program Description: Students in the B.A. in German program study the language, literature and culture of German-speaking countries. They gain a respectable measure of competence in reading, writing and oral/aural skills in the German language. They are required to take a number of related courses on topics such as:

- Art.
- German history.
- Government.
- International business.
- Religion.

Students are encouraged to study abroad in Germany as participants in ASU's summer program in Regensburg, or one of the academic-year exchange programs available at several German universities.

Additional Program Fee: N.
Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates have a variety of career opportunities in:

- Airlines.
- International trade firms.
- U.S. companies that have branches in Austria, Germany and Switzerland and other fields.

German is also useful in Eastern and Southeastern Europe. Some students decide to pursue graduate work, eventually teaching the language and culture in universities or colleges. With state certification, high school teaching is also an option.

## Contact Information:

Liberal Arts and Sciences, College of School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
LL 440
silcadvising@asu.edu
480-965-6281

## Global Health, BA (LASSHBA)

Campus: TEMPE

Program Description: The B.A. in global health is an interdisciplinary degree designed for students who seek a broad and flexible set of skills for understanding contemporary health challenges and thinking about how they might best be solved. "Global" is understood in the anthropological sense, meaning ways of understanding and addressing disease, health and well-being that can incorporate all cultures, places and time, and that can integrate knowledge of health's social, historical, biological and ecological dimensions.
The curriculum emphasizes the development of core skills in critical thinking and problem solving and the importance of direct experience (research, study abroad, service learning and advocacy). The degree cultivates capacities to deal with any complex problem with social components: how to identify the critical issues, ask the right questions and create solutions that are meaningful and effective.
Students are required to participate in an approved global health study abroad program

## Additional Program Fee: N.

Second Language Requirement: Y.
First Required Math Course: MAT 142 College Mathematics

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Nationally and internationally, the health field provides enormous and varied career opportunities, and demands for graduates with skills are high and growing. The major would support the goals of those who plan to pursue careers in academic research, teaching, and in health services, whether in universities, government agencies, departments of health, international agencies (WHO, CDC, Global Health Council, World Bank, Interamerican Development Bank), non-governmental organizations, or in private business or industry. The degree also provides those who plan advanced specialist health training, such as in nursing, medicine, dentistry or pharmacy, with a broad intellectual base that enhances later specialist training.
In Arizona and elsewhere, there is a pressing need for professionals with appropriate skills to work in cross-cultural settings or with underserved populations (such as migrants, minorities and those living in poverty), and many of these jobs are directly or indirectly related to health.

## Contact Information:

Liberal Arts and Sciences, College of
School of Human Evolution \& Social Change
http://shesc.asu.edu/undergraduate_studies
SHESC 233
shesc.undergrad@asu.edu
480-965-6215

## Global Studies, BA (LASGSBA)

Campus: TEMPE

Program Description: The global studies program addresses some of the most challenging issues through teaching, research, and public policy activities. They include:

- Economic and social development under globalization.
- Global climate change.
- Justice and human rights.
- Migration and global households.
- Pandemics and global health.
- Religious conflicts and rights.
- The role of global cities.
- World heritage.

Within the program's intellectual framework, students are required to take courses in at least two areas of emphasis, providing them with a broad understanding of global processes and institutions. Areas of emphasis include:

- Cultural perspectives and place.
- Economic development.
- Environment.
- Global governance.
- Urban systems.
- Violence, conflict and human rights.

Global studies faculty members orient their work toward solving global issues, not around traditional disciplines; they have been recruited from highly diverse backgrounds including:

- Economics.
- Law.
- Geography.
- Anthropology.
- Planning.
- Political science.
- Sociology.


## Additional Program Fee: N.

Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.

Career Opportunities: The program prepares students for professional and graduate training (including law, business and public policy) and provides professional training to future decision-makers in government, business and policy entities.

## Contact Information:

Liberal Arts and Sciences, College of
School of Politics and Global Studies
http://pgs.clas.asu.edu/
COOR 6705
globalstudies@asu.edu
480-965-8563

## History, BA (LAHISBA)

Campus: ONLNE, TEMPE
Program Description: Students in the B.A. in history program study the growth and development of human society from all aspects:

- Cultural.
- Economic.
- Political.
- Social.

Students are required to complete course work in one geographic emphasis. The department covers the history of:

- Europe.
- the U.S.
- Asia.
- Latin America.
- Africa.

Courses are designed to give students both breadth and depth in understanding today's complex world.
Students considering the Online campus B.A. in history program should contact the program's academic advisor, Manisha Master, for more information.

Additional Program Fee: N.
Second Language Requirement: $Y$.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Cochise College, Maricopa County Community College District, Yavapai College.

Career Opportunities: History majors seek jobs in:

- Business and industry.
- Education.
- Government.

They pursue graduate study in:

- Business.
- History.
- Justice studies.
- Law.
- Medicine.
- Public administration.
- Public history.
- Theology.

History is an excellent pre-professional major for:

- Business.
- Justice studies.
- Law.
- Medicine.
- Public administration.
- Public history.
- Theology.

A high-quality record as a history major indicates to employers and admissions officers that the student has acquired a respectable degree of literacy. It also demonstrates that the student has the ability to conduct research, assimilate material, read critically and evaluate conflicting interpretations of events.

## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://shprs.clas.asu.edu/history
COOR 3307
SHPRSadvising@asu.edu
480-965-8364

## Integrated Studies, BA (LAISTBA)

Campus: TEMPE

Program Description: The integrated studies program is not a general studies major, but a unique and highly focused plan of study for gifted students whose academic interests are not served by the more traditional disciplinary studies. Superior students whose interests lie beyond the traditional departmental emphases have the opportunity to work with various faculty members in creating an individualized B.A. plan.
Students who elect an integrated studies major pursue a coherent course of study involving more than one department or college. Students majoring in integrated studies transcend the traditional disciplinary structure of the college to concentrate on individually designed areas of study not covered by the traditional major and minor.

Additional Program Fee: N.
Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.

Admission Requirements: Not available to freshmen. There is an additional application for this degree. Admissions consist of completion of 32 credit hours at ASU with a GPA of at least 3.25 and three letters of recommendation from ASU faculty members. For more information contact the assistant dean for academic affairs, Office of Student and Academic Programs, Fulton Center, Suite 110.

Career Opportunities: An integrated studies major may or may not be professionally or vocationally oriented, depending on the area of concentration. All integrated studies majors, however, share with all other liberal arts and sciences students the goal of developing analytical and communicative abilities. The program combines breadth of learning with an appropriate depth in some focused area of inquiry. Integrated studies graduates are prepared to enter the work force or pursue graduate or professional studies at the completion of their undergraduate program.

## Contact Information:

Liberal Arts and Sciences, College of
Dean, College of Liberal Arts and Sciences
http://clas.asu.edu/students
FULTN 110
CLASUndergrad@asu.edu
480-965-6506

## Integrated Studies, BS (LAISTBS)

Campus: TEMPE

Program Description: The integrated studies program is not a general studies major, but a unique and highly focused plan of study for gifted students whose academic interests are not served by the more traditional disciplinary studies. Superior students whose interests lie beyond the traditional departmental emphases have the opportunity to work with various faculty members in creating an individualized B.S. plan.
Students who elect an integrated studies major pursue a coherent course of study involving more than one department or college.
Students majoring in integrated studies transcend the traditional disciplinary structure of the college to concentrate on individually designed areas of study not covered by the traditional major and minor.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: Not available to freshmen. There is an additional application for this degree. Admissions consist of completion of 32 credit hours at ASU with a GPA of at least 3.25 and three letters of recommendation from ASU faculty members. For more information contact the assistant dean for academic affairs, Office of Student and Academic Programs, Fulton Center, Suite 110.

Career Opportunities: The integrated studies program may or may not be professionally or vocationally oriented, depending on the area of concentration. However, the program shares with all other liberal arts and science degrees the goal of developing analytical and communicative abilities. The program combines breadth of learning with an appropriate depth in some focused area of inquiry. Integrated studies graduates are prepared to enter the work force or pursue graduate or professional studies at the completion of their undergraduate program.

## Contact Information:

Liberal Arts and Sciences, College of
Dean, College of Liberal Arts and Sciences
http://clas.asu.edu/undergraduate_studies
FULTN 110
CLASUndergrad@asu.edu
480-965-6506

## International Letters and Cultures, BA (LASLCBA)

Campus: TEMPE
Program Description: The B.A. in international letters and cultures is a degree grounded in the study of at least one foreign language. It is a more transcultural and transdisciplinary degree than a traditional languages and literature degree and is designed to
encourage students to explore and even challenge the traditional boundaries of cultures, texts and disciplines. Students choose a program that requires study and research in a minimum of two cultures or disciplines (or both). Students must meet with an advisor in the School of International Letters and Cultures to discuss this degree option.

Additional Program Fee: N.
Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: This degree program will provide essential skills that employers in government, education and various business sectors are looking for, including:

- Knowledge of other cultures.
- Strong written and oral communication skill.
- Proficiency in another language or languages.
- Valuable critical thinking and analytical skills.


## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
LL 440
silcadvising@asu.edu
480-965-6281

## International Letters \& Cultures (Classics), BA (LASLCCBA)

## Campus: TEMPE

Program Description: The B.A. in international letters and cultures with a concentration in classics allows students to pursue a traditional degree in classics in a non-traditional way. Students are expected to acquire the traditional skills in the core ancient languages and history (with an emphasis in either ancient Greek or Latin language), but they are also asked to seek out courses in several departments across the university and tailor their degree to whatever aspect of classical scholarship appeals to them. This classics degree, therefore, encourages academic enterprise and intellectual and cultural diversity among individual students.

Additional Program Fee: N.
Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: The reasoning, research, language, and analysis skills developed in study of the classics are well suited for many careers, particularly in:

- Business.
- Education.
- Law.


## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/
LL 440
silcadvising@asu.edu
480-965-6281
Italian, BA (LAITABA)
Campus: TEMPE

Program Description: Students in the B.A. in Italian program study the language, literature and culture of Italy. They gain a respectable measure of competence in reading, writing and oral/aural skills in the Italian language. They are required to take a number of related courses on topics such as:

- Art.
- Government.
- Italian history.
- Religion.

A summer program in Florence, Italy, is available for students who wish to study the language and culture while living in the country. There are also study abroad programs in various cities in Italy during the academic year.

Additional Program Fee: N.
Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: There are numerous career opportunities for Italian graduates in:

- Airlines.
- Art museums.
- International trade firms, including U.S. companies that have branches in Italy.
- And other fields.

Some graduates pursue doctoral studies, eventually teaching the language in universities or colleges.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
LL 440
silcadvising@asu.edu
480-965-6281

## Jewish Studies, BA (LAJSTBA)

Campus: TEMPE

Program Description: The Jewish studies major offers an interdisciplinary, cross-cultural program of study in the humanities, which examines ethical, religious and spiritual values; a range of philosophical and political viewpoints; and provides a balance to the study of contemporary science and technology. The major focuses on the study of Judaism, defined as the civilization of the Jews; considers Jewish history and modern life; enhances the student's understanding of Jewish contributions to Western civilization; and facilitates enhanced cultural awareness and global perspective.

## Additional Program Fee: N.

Second Language Requirement: Y.
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: Jewish Studies is an an interdisciplinary, cross-cultural, core discipline within the humanities which explores ethical, religious and spiritual values and provides a balance to the study of contemporary science and technology. Students who receive a B.A. in Jewish studies and pursue a career with one of the hundreds of U.S. companies that do business in Israel will have a competitive edge because of their familiarity with the Hebrew language and Jewish culture. Jewish studies graduates are also prepared to:

- Attend rabbinical seminary in preparation to become a community rabbi or chaplain.
- Engage in world political and economic issues.
- Pursue advanced education in Jewish professional service field(s).
- Pursue advanced degrees related to their area of interest. Examples areas may include:
- History and society, e.g., archaeology, history, justice studies, poltical science.
- Religion and thought, e.g., ethics, law, philosophy, religious studies.
- Literature and culture, e.g., creative writing, film and media, journalism.


## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://jewishstudies.clas.asu.edu/
COOR 3rd floor advising center
SHPRSAdvising@asu.edu
480-727-6906

## Justice Studies, BA (LAJUSBA)

Campus: TEMPE

Program Description: The B.A. in justice studies is intended for undergraduate students with an interest in an interdisciplinary examination of the philosophical, historical and cultural dimensions of contemporary justice issues. Like the justice studies B.S., the B.A. emphasizes five core areas of study:

- Citizenship, migration and human rights.
- Gobalization, sustainability, and economic justice.
- Law, policy and social change.
- Media, technology and culture.
- Social identities and communities.

Scholarship in these areas is aligned with finding just solutions to complex social problems locally and globally. Whereas the B.S. degree provides undergraduate students with training in social science research methods and statistics, the B.A. degree will provide an option for students desiring a more humanities-oriented framework from which to approach issues of justice. Students will develop an appreciation for studying:

- Historical events.
- Language, rhetoric and cultural context as they relate to justice.
- Philosophical systems.
- Symbolic meanings.


## Additional Program Fee: N.

## Second Language Requirement: Y .

First Required Math Course: MAT 142 College Mathematics.

Career Opportunities: Students who complete the B.A. in justice studies will be prepared to engage in social, political, and economic issues through community service and social agency work including local and global non-governmental organizations as researchers, administrators or practitioners.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://sjsi.clas.asu.edu
WILSN 125
justiceinfo@asu.edu
480-965-7682

## Justice Studies, BS (LAJUSBS)

Campus: ONLNE, TEMPE

Program Description: Justice and social inquiry is an innovative social science program that places social justice at the center of it scholarship and teaching. The B.S. in justice studies is designed for students interested in studying the multiple meanings and
manifestations of justice and social change, both locally and globally. Students receive interdisciplinary training in research methods and theory, and take courses that provide them with a comprehensive understanding of substantive issues within five primary research areas. These five core substantive areas are:

- Citizenship, migration and human rights.
- Media, technology and culture.
- Law, policy and social change.
- Globalization, sustainability and economic justice.
- Social identities and communities.

The goal is to enable students, faculty and graduates to use their skills to find solutions to complex social problems.

Additional Program Fee: $N$.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Central Arizona College, Coconino Community College, Maricopa County Community College District.

Career Opportunities: Many graduates go on to law school, graduate school or other professional degree programs. Students emerge from this program with the knowledge and skills designed to bring social justice concerns to their professional careers. Our graduates work in a variety of fields including:

- Human welfare agencies.
- Law.
- Non-governmental organizations.
- Other public service organizations.


## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://justice.clas.asu.edu
WILSN 125
justiceinfo@asu.edu
480-965-7682

## Mathematics, BA (LAMATBA)

Campus: TEMPE
Program Description: Mathematics is a crucial component in many disciplines where the need for quantification in the analysis of phenomena is strong, such as:

- Business and economics.
- Engineering applications.
- Life sciences.
- Physics.
- Social sciences.

The B.A. in mathematics provides a general background in mathematics, at a level sufficient to improve critical thinking, rigor and problem solving skills required in certain ""social"" fields. The B.S. requires six more credit hours within the major than the B.A. The B.A. program has a foreign language requirement. A secondary education B.A. with a specialization in mathematics is also available.

Additional Program Fee: Y.
Second Language Requirement: $Y$.
First Required Math Course: MAT 243 Discrete Math Structures.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Employment opportunities for math majors can be found in virtually all sectors of industry:

- Academia (e.g., high-school or college teacher, university professor).
- Applied math (scientific computing).
- Business (e.g., actuary for bank or insurance company, operations research).
- Engineering, biotechnology, computer, government (e.g., consultant, federal and state organizations).
- Graduate school (mathematics or other fields).
- Medicine.

Graduates with a B.A. in mathematics may pursue a master's degree in a more applied field (social sciences) or an M.B.A. and typically move on to ""social"" careers (e.g., social scientist, politics, education). Graduates also have the option of becoming certified and teaching mathematics in public middle schools and high schools. Many careers require a command of quantitative methods and persons qualified in mathematics hold a favorable edge in competition for job opportunities.

## Contact Information:

Liberal Arts and Sciences, College of
School of Mathematical and Statistical Sciences
http://math.asu.edu/
PSA 211
math@asu.edu
480-965-7195

## Mathematics, BS (LAMATBS)

Campus: TEMPE
Program Description: Mathematics is a crucial component in many disciplines where the need for quantification in the analysis of phenomena is strong, such as:

- Business and economics.
- Engineering applications.
- Life science.
- Physics.
- Social sciences.

The B.S. includes more analytical courses, as well as additional advanced courses compared to the B.A. It is the most popular math degree at ASU. Many B.S. majors are dual majors in a more applied field, such as physics and engineering.

## Additional Program Fee: Y .

Second Language Requirement: N.
First Required Math Course: MAT 270 Calculus w/Analytic Geometry I.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Employment opportunities for math majors can be found in virtually all sectors of industry:

- Academia (e.g., high-school or college teacher, university professor).
- Applied math (scientific computing).
- Business (e.g., actuary for bank or insurance company, operations research).
- Engineering, biotechnology, computer, government (consultant, federal and state organizations).
- Graduate school (mathematics or other fields).
- Medicine.

Many careers require a command of quantitative methods and persons qualified in mathematics hold a favorable edge in competition for job opportunities. Profiles and descriptions of jobs and career paths of actual mathematicians in a wide array of fields are published by the American Mathematical Society.

Students exploring becoming a middle or high school teacher can find more information about the concurrent degree program at http://catalog.asu.edu/concurrent_dual.

## Contact Information:

Liberal Arts and Sciences, College of
School of Mathematical and Statistical Sciences
http://math.asu.edu/
PSA 211
math@asu.edu
480-965-7195

## Mathematics (Statistics), BS (LAMATTBS)

Campus: TEMPE
Program Description: Mathematics is a crucial component in many disciplines where the need for quantification in the analysis of phenomena is strong, such as:

- Business and economics.
- Life sciences.
- Physics.
- Engineering applications.
- Social sciences.

The B.S. in mathematics with a concentration in statistics focuses on course work related to the statistical analysis of data and the evaluation of probabilistic models based on these data. Such models are heavily used in the banking and insurance industries, but also increasingly in more engineering fields where the effects of noise sometimes play a critical role in the behavior of a model. Many B.S. students in the statistics concentration are dual business or economics majors.

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 270 Calculus w/Analytic Geometry I.
Career Opportunities: Employment opportunities for math majors can be found in virtually all sectors of industry:

- Academia (e.g., high-school or college teacher, university professor).
- Applied math (scientific computing).
- Business (e.g., actuary for bank or insurance company, operations research).
- Engineering, biotechnology, computer, government (e.g., consultant, federal and state organizations).
- Graduate school (mathematics or other fields).
- Medicine.

A course of study in statistics is especially useful in technical positions in finance, insurance and business, as well as in fields where data analysis plays an important role, such as genomics. Graduates also have the option of becoming certified and teaching mathematics in public middle schools and high schools. Many careers require a command of quantitative methods and persons qualified in mathematics hold a favorable edge in competition for job opportunities.

## Contact Information:

Liberal Arts and Sciences, College of
School of Mathematical and Statistical Sciences
http://math.asu.edu/
PSA 211
math@asu.edu
480-965-7195

## Microbiology, BS (LAMICBS)

Campus: TEMPE

Program Description: The microbiology program is a focused degree that seeks to:

- Educate students in the basic background knowledge of microbiology with many courses related more specifically to medical microbiology.
- Teach students to critically think about microbiology.
- Train students in some hands-on laboratory techniques.

The curriculum has been designed to reach these goals. Students with this degree can go on to jobs in the biotechnology, pharmaceutical food and environmental sampling industries. In addition, the degree is highly compatible with the requirements for professional schools (medical, PA, dental, optometry, veterinary, or other health professional schools) and graduate schools.
Students in the B.S. in microbiology program engage in the study of microorganisms (bacteria, viruses, fungi) and their activities, including their impact on humans, animals and the environment. Several basic and applied sub disciplines are available.

Additional Program Fee: Y.
Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Microbiology (including biotechnology and molecular biology) is a rapidly developing science with career opportunities in industrial, governmental, hospital-clinic and academic environments. Graduates work in:

- Clinical applications.
- Education.
- Production and testing of microbial products and quality control.
- Public health and environmental microbiology.
- Research and development.


## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/
LSC 206
sols.advising@asu.edu
480-727-6277

## Molecular Biosciences/Biotechnology, BS (LAMBBBS)

Campus: TEMPE
Program Description: The B.S. degree program in molecular biosciences and biotechnology (MBB) is designed to prepare students interested in molecular and cellular biology for productive careers in rapidly expanding areas in the molecular life sciences. The MBB program provides a strong foundation for molecular-based research and education including:

- Biotechnology.
- Functional genomics research.
- Gene discovery.
- Medical research and practice.

Included, with emphasis on laboratory training, are courses in:

- Biochemistry.
- Bioinformatics.
- Chemistry.
- Genetic engineering and biotechnology.
- Genetics.
- Molecular and cell biology.

Independent research at ASU or an internship elsewhere is an integral part of the major as well, along with a capstone course experience with both science and business components. Students in the B.S. in molecular biosciences and biotechnology program focus on learning the fundamentals of:

- Biochemistry.
- Cell biology.
- Molecular genetics.
- Organismal structure and function.
- Physiology.

Additional Program Fee: Y.
Second Language Requirement: N .
First Required Math Course: MAT 251 Calculus for Life Sciences.
Career Opportunities: Graduates of the molecular biosciences and biotechnology program are prepared for admission into strong graduate and professional schools or may assume positions in education, government and technical fields, and are especially well prepared for careers in biotechnology. This program will provide a foundation for:

- Gene discovery.
- Modern medical research and practice.
- Pharmacology.
- Plant research.

Explosive growth in the biotechnology industry recently has resulted in a substantial increase in the number of employment opportunities for majors in molecular biosciences and biotechnology.

## Contact Information:

Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/
LSE 218
sols@asu.edu
480-965-6899

## Philosophy, BA (LAPHIBA)

Campus: TEMPE
Program Description: A B.A. in philosophy offers a unique course of study. As the American Philosophical Association says, "Philosophy is quite unlike any other field...it is a reasoned pursuit of fundamental truths, a quest for understanding, a study of principles of conduct. It seeks to establish standards of evidence, to provide rational methods of resolving conflicts and to create techniques for evaluating ideas and arguments. Philosophy develops the capacity to see the world from the perspective of other individuals and other cultures; it enhances one's ability to perceive the relationships among the various fields of study; and it deepens one's sense of the meaning and varieties of human experience."

Additional Program Fee: N.
Second Language Requirement: Y.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District, Yavapai College.

Career Opportunities: The analytical, rhetorical and writing skills developed through the study of philosophy provide ideal preparation for a wide range of careers, including:

- Business.
- Education.
- Journalism.
- Law.
- Medicine.


## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://shprs.clas.asu.edu/philosophy
COOR 3307
SHPRSadvising@asu.edu
480-965-8364

## Physics, BA (LAPHYBA)

Campus: TEMPE
Program Description: Physics is concerned with the nature, structure and interactions of matter and radiation. The B.A. in physics provides a flexible and efficient option for students who are interested in a liberal arts degree with broad knowledge of physics and at least one other area. This degree program is ideal for students seeking to complete two degrees, with physics as the second degree. Students wishing to pursue a graduate degree in physics are advised to consider the B.S. in physics.

## Additional Program Fee: Y.

Second Language Requirement: Y .
First Required Math Course: MAT 270 Calculus w/Analytic Geometry I.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Central Arizona College.

Career Opportunities: Students graduating with a B.A. degree in physics may pursue such careers as:

- Health physicist.
- Lawyer.
- Medical doctor (with additional pre-medical course work).
- Patent attorney.
- Physical therapist.
- Radiation physicist.
- Research/lab assistant.
- Science policy analyst.
- Secondary science teacher.
- Technology support analyst.


## Contact Information:

Liberal Arts and Sciences, College of
Department of Physics
http://physics.asu.edu
PSF 470
physics.info@asu.edu
480-965-3561

## Physics, BS (LAPHYBS)

Campus: TEMPE
Program Description: Physics is concerned with the nature, structure and interactions of matter and radiation. The B.S. degree in physics provides students a thorough background in physics appropriate for further graduate study in physics, other sciences, or engineering programs.

Additional Program Fee: Y .
Second Language Requirement: N .
First Required Math Course: MAT 270 Calculus w/Analytic Geometry I.

Career Opportunities: The broad range of applicability of the principles of physics gives the physicist great flexibility in a choice of career or further education. About half of the graduates with a bachelor's degree in physics go on to graduate school in:

- Astronomy.
- Engineering.
- Medicine.
- Physics.

The other half go directly into employment in areas such as:

- Education and business.
- Engineering.
- Materials science.


## Contact Information:

Liberal Arts and Sciences, College of
Department of Physics
http://physics.asu.edu
PSF 470
physics.info@asu.edu
480-965-3561

## Political Science, BA (LAPOSBA)

Campus: ONLNE, TEMPE

Program Description: The B.A. in political science offers students the necessary skills and knowledge to participate effectively as citizens in a democratic political system and to flourish in the rapidly developing globalization of the world's political institutions, cultures and economies. The major aims to provide students with the tools and skills necessary to make connections linking theory with real world problems and issues.

Additional Program Fee: N.
Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Cochise College, Maricopa County Community College District, Yavapai College.

Career Opportunities: Many of our graduates have gone on to some of the country's most prestigious graduate programs and schools. Graduating seniors have also found a range of employment opportunities in:

- Communication.
- Education.
- Journalism.
- Law.
- Politics.
- Public service.

In fact, some of our graduating seniors have been hired to work at:

- The Arizona governor's office.
- The Federal Reserve.
- The judiciary.
- Local and national newspapers.
- Multinational corporations, state and local government.


## Contact Information:

Liberal Arts and Sciences, College of
School of Politics and Global Studies

## Political Science, BS (LAPOSBS)

## Campus: ONLNE, TEMPE

Program Description: The B.S. in political science offers students the necessary skills and knowledge to participate effectively as citizens in a democratic political system and to flourish in the rapidly developing globalization of the world's political institutions, cultures and economies. The major aims to provide students with the tools and skills necessary to make connections linking theory with real world problems and issues.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Many of our graduates have gone on to some of the country's most prestigious graduate programs and schools. Graduating seniors have also found a range of employment opportunities in the fields of:

- Communication.
- Education.
- Journalism.
- Law.
- Politics.
- Public service.

In fact, some of our graduating seniors have been hired to work at:

- The Arizona governor's office.
- The Federal Reserve.
- The judiciary.
- Local and national newspapers.
- Multinational corporations, state and local government.


## Contact Information:

Liberal Arts and Sciences, College of
School of Politics and Global Studies
http://www.asu.edu/clas/polisci
COOR 6797
480-965-6551

## Psychology, BA (LAPGSBA)

Campus: TEMPE
Program Description: The Department of Psychology is among the largest and most popular departments on the ASU Tempe campus. Psychology is the study of behavior, emotions and the mental processes of individuals and groups, approached through a scientific methodology. Our mission is to create an environment that prepares undergraduates to take their place in the world, more effective for what they have learned with us; graduates to conduct innovative psychological research and pursue careers that use those skills to the benefit of their community; and faculty to grow in expertise both in teaching and scholarship.
B.A. majors learn about statistics and research methods and use psychology content courses to develop skill sets in diverse settings, including the department's child development facilities or internships. Students in the B.A. program are exposed to theories and research addressing such fascinating topics as:

- How do children develop?
- How do people remember information over long periods of time?
- How do the mind and body react to stress?
- How can people use social influence to increase compliance?
- Which types of treatments are most effective for individuals who are depressed?


## Additional Program Fee: Y.

Second Language Requirement: $Y$.
First Required Math Course: MAT 170 Precalculus.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Arizona Western College, Maricopa County Community College District, Pima Community College, Yavapai College.

Career Opportunities: The B.A. in psychology is designed to prepare students to work in a variety of settings that provide opportunities to apply concepts and principles of psychology. This degree provides students the opportunity to develop a broad range of highly marketable skills, including analytical skills, writing and public speaking skills, and teamwork and leadership skills, as well as valuable computer skills. These skills lead to many career opportunities or graduate degrees in such fields as counseling, social work and family therapy. A B.A. in psychology also leads to professional postgraduate programs in the fields of law and medicine.

## Contact Information:

Liberal Arts and Sciences, College of
Department of Psychology
http://psychology.clas.asu.edu/undergrad/advising
PSY 255
psych.advisor@asu.edu
480-965-7258

## Psychology, BS (LAPGSBS)

Campus: TEMPE
Program Description: The Department of Psychology is among the largest and most popular departments on the ASU Tempe campus. Psychology is the study of behavior, emotions and the mental processes of individuals and groups, approached through a scientific methodology Our mission is to create an environment that prepares undergraduates to take their place in the world, more effective for what they have learned with us; graduates to conduct innovative psychological research and pursue careers that use those skills to the benefit of their community; and faculty to grow in expertise both in teaching and scholarship.
B.S. majors take advanced course work in statistics, and receive hands-on research experience by working with faculty members in the laboratory. Students in the B.S. program are exposed to theories and research addressing such fascinating topics as:

- How do children develop?
- How do people remember information over long periods of time?
- How do the mind and body react to stress?
- How can people use social influence to increase compliance?
- Which types of treatments are most effective for individuals who are depressed?


## Additional Program Fee: Y.

Second Language Requirement: $N$.
MAT 251: Calculus for Life Sciences OR MAT 270: Calculus with Analytic Geometry I

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District, Pima Community College, Yavapai College.

Career Opportunities: The B.S. in psychology emphasizes critical thinking and analytic and quantitative skills involved in psychological research to prepare students for graduate study in psychology (to be a researcher, teacher, or clinician).

## Contact Information:

Liberal Arts and Sciences, College of
Department of Psychology
http://psychology.clas.asu.edu/undergrad/advising
PSY 255

## Religious Studies, BA (LARELBA)

Campus: TEMPE
Program Description: Students in the B.A. in religious studies program engage in the comparative, cross-cultural study of religions and cultures. Employing various disciplinary approaches, including the historical, sociological, anthropological and theological, the academic study of religion seeks to interpret, analyze and evaluate the nature and role of religion in the lives of individuals and societies.
The faculty of religious studies enjoy an excellent national reputation and the degree is distinctive at ASU because the relatively small number of majors allows undergraduates to receive individual faculty attention, which is often not possible in larger departments.

## Additional Program Fee: N.

## Second Language Requirement: Y .

First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: A degree in religious studies provides a strong liberal arts background and excellent training in critical thinking and writing. Such a liberal education, which includes the development of basic intellectual skills, has become increasingly attractive to employers seeking to hire recent college graduates. Students with a degree in religious studies are also well positioned to pursue graduate studies in the liberal arts and professional programs, including:

- Business.
- Journalism.
- Law.
- Social work.


## Contact Information:

Liberal Arts and Sciences, College of
Historical, Philosophical \& Religious Studies, Sch
http://shprs.clas.asu.edu/religious_studies
COOR 3307
SHPRSadvising@asu.edu
480-965-7145

## Russian, BA (LARUSBA)

## Campus: TEMPE

Program Description: Students in the B.A. in Russian program study the language, literature and culture of Russia. They gain a respectable measure of reading, writing and oral/aural skills in the Russian language, engaging in:

- Art and architecture.
- Government and politics.
- History and sociology.
- International business.
- Linguistics.
- Literary and cultural theory.
- Literature.
- Music and dance.
- Religion.

The Russian language program also cooperates with other related units within the university (e.g., the Melikian Center for Russian, Eurasian and East European Studies) to offer a Russian and East European Studies Certificate (REESC).

Students may also take summer intensive courses in Macedonian, Albanian, Armenian, Serbo-Croatian, Tatar, Polish and a number of other Central Asian languages through the Critical Language Institute at ASU.
A study abroad program is offered in Macedonia, and advanced Russian language students may study in Moscow and St. Petersburg during the summer.

Additional Program Fee: N.
Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates have a variety of career opportunities. At present these graduates have an enviable record of postgraduate placement in the job market. Many work for firms that deal with international trade or for U.S. companies that have branches in Russia, while many find positions within government service or in teaching. A few pursue graduate work in Russian studies, eventually teaching the language and/or culture in universities or colleges.

## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
LL 440
silcadvising@asu.edu
480-965-6281

## Sociology, BS (LASOCBS)

Campus: ONLNE, TEMPE
Program Description: Sociology is the study of social life, social change and the social causes and consequences of human behavior. The B.S. in sociology trains students in written communication, computer skills, statistics and research methods, and offers a wide variety of substantive courses on contemporary social issues ranging from crime to population trends, and courses on social institutions, such as the family, education and religion.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Cochise College, Maricopa County Community College District, Yavapai College.

Career Opportunities: An undergraduate degree in sociology not only provides excellent preparation for future graduate work in sociological research, social work, law, medicine and counseling, it also prepares undergraduates for direct entry into positions in business, social service and government.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social and Family Dynamics
http://ssfd.clas.asu.edu/
SS 144
email@ssfd.info
480-965-6978

## Spanish, BA (LASPABA)

Campus: TEMPE
Program Description: Students in the B.A. in Spanish program have the opportunity to gain oral, reading, speaking and written proficiency in the language. The program offers two study tracks from which to choose, 1) literature and culture, or 2) Spanish linguistics.

The literature and culture track provides an in-depth understanding of the themes of Spanish and Latin American culture and literature and the contemporary issues throughout the Spanish-speaking world.
The Spanish linguistics track provides an in-depth understanding of the Spanish language (syntax, morphology) and may include courses in translation (English/Spanish).
Students are encouraged to contact a school advisor to discuss the two available tracks. ASU offers opportunities throughout the year to study in Spain, Mexico and other Spanish-speaking countries through study abroad and exchange programs. Students majoring in Spanish may also work toward a professional certificate in Spanish/English translation.

Additional Program Fee: N.
Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates may choose from several career options:

- Become certified to teach high school.
- College or university teaching and research in linguistics or literature through advanced degrees.
- Translation or interpretation studies.

Graduates may combine Spanish with other fields with an international emphasis, such as:

- Business.
- Engineering.
- Journalism.
- Political science.


## Contact Information:

Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
LL 440
silcadvising@asu.edu
480-965-6281

## Speech \& Hearing Science, BS (LASHSBS)

Campus: TEMPE
Program Description: Students in the B.S. in speech and hearing science program study the normal aspects of the communication process. Emphasis is placed on:

- Anatomy and physiology of the hearing mechanism.
- The human communication system, including normal development of speech and language.
- Speech, language and hearing science.

Graduates attain broad-based knowledge in the basic aspects of speech, language and hearing sciences, which prepares them for graduate studies in audiology or speech language pathology.

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 170 Precalculus.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Employment opportunities for those with a B.S. may include positions as:

- Management trainees.
- Research assistants/associates in behavioral disciplines.
- Speech-language pathology assistants.

Primarily, a degree in this field prepares the student for entrance into a graduate program in speech-language pathology (SLP) or audiology. In both fields, a graduate degree is required for employment.
The undergraduate degree in speech and hearing science is also excellent preparation for those who wish to enter other professional graduate programs such as:

- Education.
- Law.
- Medicine.
- Rehabilitation.
- Special education.
- Teaching for the deaf.

Graduates in SLP and audiology can work in a variety of settings:

- Clinics.
- Hospitals.
- Schools.


## Contact Information:

Liberal Arts and Sciences, College of
Department of Speech and Hearing Science
http://shs.asu.edu/
COOR 2215
shsinfo@asu.edu
480-965-4520

## Transborder Chicana/o \& Latina/o Studies (Media and Expressive Culture), BA (LATCLMBA) <br> Campus: TEMPE

Program Description: Students choosing this concentration study the expressive cultures of Latina/o communities. Its objective is to equip students with critical skills to understand how expressive culture produces and reproduces historical and cultural narratives about Latina/o communities in general and Mexican and Chicana/o communities specifically. Students engage in the study of these narratives in transdisciplinary, humanities-based contexts, including:

- History
- Literature.
- Media.
- Performance.
- Visual art.

The concentration exposes students to the contributions that transborder communities have made to the arts and humanities. Student outcomes include 1) becoming critical consumers of media and expressive culture, and 2) becoming conversant in the meaning-making processes and practices that shape and impact Latina/o populations.

Additional Program Fee: N.
Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The bachelor's program in transborder Chicana/o and Latina/o studies prepares ASU graduates for career opportunities in a variety of national and international fields, including:

- Business fields.
- Communication.
- Education.
- Health services.
- Justice studies.
- Public policy and administration.

Transborder Chicana/o and Latina/o majors will also be well prepared to enter graduate study in such high need career fields as:

- Business.
- Education.
- Law.
- Medicine.
- Public health.
- Social work.


## Contact Information:

Liberal Arts and Sciences, College of
School of Transborder Studies
http://transborder.clas.asu.edu
COOR 6635
tcls.info@asu.edu
480-965-5091

## Transborder Chicana/o \& Latina/o Studies (Transborder Community Development and Health), BA (LATCLTBA)

Campus: TEMPE
Program Description: The B.A. in transborder Chicana/o and Latina/o studies is an interdisciplinary degree program whose central mission is to provide a value-added environment that increases the direct participation of Chicana/o and Latina/o populations in the formation of human and capital development.
By developing a program of social science research and teaching with an emphasis on community development and health, students will concentrate on patterns of physical, mental and social health disparities closely associated with:

- Differential health care.
- Learning how to develop appropriate mitigating applied programs.
- Limited access to insurance.
- Poverty.
- Reliance on emergency measures and facilities.

Other major orientations with an applied focus will include:

- Environmental home health.
- Vulnerable populations.

Additional Program Fee: $N$.
Second Language Requirement: $Y$.
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The bachelor's program in transborder Chicana/o and Latina/o studies prepares ASU graduates for career opportunities in a variety of national and international fields, including:

- Business fields.
- Communication.
- Education.
- Health services.
- Justice studies.
- Public policy and administration.

Transborder Chicana/o and Latina/o majors will also be well prepared to enter graduate study in such high need career fields as:

- Business.
- Education.
- Law.
- Medicine.
- Public health.
- Social work.


## Contact Information:

Liberal Arts and Sciences, College of
School of Transborder Studies
http://transborder.clas.asu.edu
COOR 6635
tcls.info@asu.edu
480-965-5091

## Transborder Chicana/o \& Latina/o Studies (US and Mexican Regional Immigration Policy \& Economy), BA (LATCLUBA)

## Campus: TEMPE

Program Description: The B.A. in transborder Chicana/o and Latina/o studies is an interdisciplinary degree program whose central mission is to provide a value-added environment that increases the direct participation of Chicana/o and Latina/o populations in the formation of human and capital development. This concentration has a strong applied orientation and focuses on the regional and transnational policies and practices that have led to enormous demographic changes in the borderlands of the immediate U.S.Mexico border region, and the entire country (with a total of 20.6 million people of Mexican origin, born in or migrated to the U.S.). Our focus is concerned with the manner in which economic and political decisions between Mexico and the United States, as well as other transnational policies concerning other countries, strongly influence:

- Demographic transitions.
- Ecological conditions.
- Economic policy towards trade.
- The nexus of relations that are established across borders at local, regional and transborder levels.
- The present state of human migration.

Additional Program Fee: $N$.
Second Language Requirement: $Y$.
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The bachelor's program in transborder Chicana/o and Latina/o studies prepares ASU graduates for career opportunities in a variety of national and international fields, including:

- Business fields.
- Communication.
- Education.
- Health services.
- Justice studies.
- Public policy and administration.

Transborder Chicana/o and Latina/o majors will also be well prepared to enter graduate study in such high need career fields as:

- Business.
- Education.
- Law.
- Medicine.
- Public health.
- Social work.


## Contact Information:

Liberal Arts and Sciences, College of
School of Transborder Studies
http://transborder.clas.asu.edu
COOR 6635
tcls.info@asu.edu
480-965-5091

## Urban Planning, BSP (ARPUPBSP)

Campus: TEMPE
Program Description: Urban planners guide communities in making wise decisions about their use of land and resources. The B.S.P. in urban planning program offers students expertise in both the analysis and the synthesis of the physical, social, political and economic issues that shape urban and regional development. Students take courses that include:

- Comprehensive planning, socioeconomic and environmental analysis.
- Computer and analytical methods.
- Planning law.
- Public-policy formulation and administration.
- Site planning.
- Urban design.

Planning includes:

- Computer and research methods.
- Environmental impact assessment.
- Geographic information systems.
- Housing.
- Landscape architecture and urban design.
- Planning and zoning law.
- Public policy formulation and administration.
- Transportation.
- Urban and development economics.
- Utilities.


## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: Graduates in planning pursue career opportunities with private planning firms and governmental planning agencies. Some planners elect to pursue graduate degrees to develop specialty skills and to enhance their opportunities for career advancement.

## Contact Information:

Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/
COOR 5673
geoplan@asu.edu
480-965-7533

## Women and Gender Studies, BA (LAWSTBA)

## Campus: TEMPE

Program Description: The B.A. in women and gender studies offers a comprehensive program of study that empowers students to make a difference in the world. Students learn to challenge conventional wisdom about gender and learn new ways of viewing the world through the study of:

- Culture.
- Economics.
- Film.
- History.
- Literature.
- Politics.
- Science.

Internship and leadership opportunities allow students to pursue career goals in:

- Business.
- Government.
- Nonprofit organizations.

Additional Program Fee: N.
Second Language Requirement: Y.
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The interdisciplinary women and gender studies program prepares students for many different career opportunities upon graduation. Graduates have:

- Become consultants and counselors.
- Become lawyers.
- Become teachers.
- Created businesses.
- Secured careers in public relations.
- Worked in nonprofit organizations and agencies serving women and girls.
- Worked in policy and government.

Our graduates are also well prepared for graduate and law school and have been admitted to prestigious programs.

## Contact Information:

Liberal Arts and Sciences, College of
School of Social Transformation
http://wgs.asu.edu
WHALL 205
wgs.asutempe@asu.edu
480-965-2358

## New College of Interdisciplinary Arts and Sciences

## American Studies, BA (ASAMSBA)

## Campus: WEST

Program Description: The B.A. in American studies, within the New College of Interdisciplinary Arts and Sciences, enables students to look at the experiences of North Americans and their environment from a variety of historical and contemporary perspectives. Courses are grouped into four emphases:

- American cultures: concentrating on systems of belief and their symbolic expression in literature, art, philosophy, and regional and popular cultures.
- American lives: exploring the ways in which categories of race, ethnicity, class and gender intersect with individual and community experience.
- American systems: dealing with political, economic, religious and legal institutions.
- Writing: stressing critical writing skills and training students to pursue careers in which writing is a major activity.

Students learn to think and write critically, to conduct research and to appreciate the changing and diverse nature of American life. Students determine appropriate programs of study in consultation with department academic advisors.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates are well equipped to embark on a wide variety of careers in government, education, business, museum and foundation work; journalism and other forms of professional writing; and in other areas where these capabilities are highly valued and sought. The program also serves as excellent preparation for law school and for graduate programs in fields such as American studies, English, journalism, history and art history. Ideally suited to careers in which research, analysis and planning play a central role.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/majors/americanstudies
FAB N201
harcs.dept@asu.edu
602-543-4444

## Applied Computing, BS (ASACOBS)

## Campus: WEST

Program Description: The B.S. in applied computing, within the New College of Interdisciplinary Arts and Sciences, prepares students to collect and analyze data; to allow for efficient, effective and ethical user interaction with computer systems; to apply skills to lead the development of technology systems; to engage in creative efforts; and to develop and assure quality and value of information. The program has both a technical component, concerned with the design and use of appropriate systems and technologies, and a social sciences component, concerned with understanding how people seek, obtain, evaluate, use and categorize information. Students receive a solid foundation in mathematics, technology and social sciences. Students can also choose one of three concentrations within the major:

- Database systems.
- Digital media and graphic design.
- Networking and distributed processing.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Students are prepared to integrate technology with human activities, to respond to global changes, to solve problems and to create and manage the technological production of information and creative products. Core information technology industries are among the fastest growing sectors in the U.S. economy. Graduates will find employment opportunities with corporations and businesses, nonprofit and government agencies, digital arts media industries and in the academic world.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Mathematical and Natural Sciences
http://newcollege.asu.edu/programs/app_comp/
CLCC 217
MNS.Dept@asu.edu
602-543-6050

## Applied Mathematics, BS (ASMATBS)

Campus: WEST

Program Description: The B.S. in applied mathematics offers an interdisciplinary degree providing students with a broad and rigorous foundation in applied mathematics. The program emphasizes an education in quantitative problem solving and critical thinking through a survey of courses exposing students to a wide variety of mathematical theories, techniques and applications that are currently used by analysts and researchers in government, industry and nonprofit organizations. Students will also complete a capstone project involving real-world problems under the supervision of an advisor and in close consultation with an external project sponsor.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 270 Calculus w/Analytic Geometry I.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Students graduating with a B.S. in applied mathematics have a wide range of career options in industry, finance, government, nonprofit organizations and education, as well as advanced degrees in the mathematical sciences (e.g., mathematics, statistics, and computer science). Based on students' career interests, they may enroll in degree tracks to help guide the students' choice of courses, such as:

- Applied mathematical networks.
- Financial mathematics.
- General applied mathematics.
- Mathematical biology.
- Operations research.


## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Mathematical and Natural Sciences
http://newcollege.asu.edu/
CLC C217

## Applied Science, BAS (ASBASBAS)

## Campus: WEST

Program Description: The B.A.S. program, within the New College of Interdisciplinary Arts and Sciences, combines the technical concentration knowledge earned in the student's Associate of Applied Science with a broader education gained at the bachelor's level of education. Included in the program of study is an area of concentration (using an approved ASU minor or creating a concentration that is completely individualized) unique to their own interests and career pursuits. For example, the area of concentration can include, but is not limited to:

- Business.
- Communication.
- Criminal justice and pre-professional studies.
- Education and teaching.
- Environmental issues and physical sciences.
- Languages and cultures.
- Social sciences and policy issues.

The program is capped with an internship experience.
This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: $N$.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree. Not available for freshmen.

Career Opportunities: Emphasizing professional study combined with a specific area of concentration (e.g., business, communication studies, English, gerontology, history, psychology or pre-professional studies), students tailor their programs to meet individualized career goals. The capstone internship program prepares students to make the transition smoothly to post-
baccalaureate employment in business, cultural, educational, community and human service settings, as well as to graduate school. Students planning graduate or professional degrees in law, business, social sciences, helping professions or in traditional disciplines benefit from the flexibility of this program for a broad range of future academic and career pursuits.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/majors/app_science
FAB N201
harcs.dept@asu.edu
602-543-4444

## Communication, BA (ASCOMMBA)

## Campus: WEST

Program Description: Communication is an extensive field involving the exploration of messages and their various meanings. Such exploration occurs in countless ways, including the study of messages between individuals in relationships, between employees in organizations, between media and their respective audiences, between social institutions and their constituents, and between members of different cultures. The B.A. prepares students to work in communications-intensive careers, such as public relations, corporate communications, customer relations, new media, health communications, crisis management, training, human resources
management and media relations. It readies graduates to perform various forms of data analysis, communication assessment and technical reporting. It also prepares students for graduate study in the social sciences, law, humanities and management.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Central Arizona College, Maricopa County Community College District.

Career Opportunities: Communication is a broadly based discipline that trains individuals to speak and write competently, to manage relationships well, to effectively problem solve, and to understand the role and function of communication in public forums, organizational settings, relational exchanges and intercultural situations. Because these skills are crucial to many professions, communication graduates work in a variety of fields including:

- Advertising.
- Customer service and customer relations.
- Education.
- Fundraising.
- Health and human services.
- Human resources.
- International service.
- Legal professions.
- Lobbying.
- Management.
- Media and public relations.
- Mediation.
- Ministry.
- Personnel.
- Public administration.
- Public advocacy.
- Public office.
- Public relations.
- Research.
- Sales and marketing.
- Speech writing.
- Training and development.


## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/communication
FAB S105
SBS.Dept@asu.edu
602-543-6058

## Communication, BS (ASCOMMBS)

Campus: WEST
Program Description: Communication is an extensive field involving the exploration of messages and their various meanings. Such exploration occurs in countless ways, including the study of messages between individuals in relationships, between employees in organizations, between media and their respective audiences, between social institutions and their constituents, and between members of different cultures. The B.S. prepares students to work in communications-intensive careers, such as public relations,
corporate communications, customer relations, new media, health communications, crisis management, training, human resources management and media relations. It readies graduates to perform various forms of data analysis, communication assessment and technical reporting. It also prepares students for graduate study in the social sciences, law, humanities and management.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Communication is a broadly based discipline that trains individuals to speak and write competently, to manage relationships well, to effectively problem solve, and to understand the role and function of communication in public forums, organizational settings, relational exchanges and intercultural situations. Because these skills are crucial to many professions, communication graduates work in a variety of fields including:

- Advertising.
- Customer service and customer relations.
- Education.
- Fundraising.
- Health and human services.
- Human resources.
- International service.
- Legal professions.
- Lobbying.
- Management.
- Media and public relations.
- Mediation.
- Ministry.
- Personnel.
- Public administration.
- Public advocacy.
- Public office.
- Public relations.
- Research.
- Sales and marketing.
- Speech writing.
- Training and development.


## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/communication
FAB S105
SBS.Dept@asu.edu
602-543-6058

## English, BA (ASENGBA)

Campus: WEST

Program Description: The primary mission of the program is undergraduate education. Graduates should be able to write clearly and effectively, to think critically and to construct well-supported rational arguments. They should gain an awareness of genre, should be able to take a critical approach to texts, and should learn to shape their discourse to suit their intended audience.

The program, in its thematic cluster design, provides students with a balanced overview of major literature in the English language - major authors, regional and ethnic literatures and writing by women - and an awareness of the role of literary discourse in broader social and historical contexts.
The program stresses both the formal aesthetic qualities of texts and the issues of class, gender, race and ethnicity relating to literary representation. It provides students a familiarity with standard literary critical terminology and an awareness of a variety of theoretical approaches to literary study. It relates works of literature to historical events, cultural patterns, philosophical and theological concepts, and technological innovations.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Central Arizona College, Eastern Arizona College, Maricopa County Community College District.

Career Opportunities: The program prepares students for graduate and professional training, including law, business, teaching and public policy. With breadth and emphasis on the communication of ideas, it serves as an excellent point of departure for careers in marketing, public relations, government, diplomacy and community work.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/majors/english
FAB N201
harcs.dept@asu.edu
602-543-4444

## Ethnicity, Race, First Nations Studies, BA (ASETHBA)

Campus: WEST
Program Description: Ethnicity, Race, First Nations Studies is the first such B.A. program in Arizona. It provides an integrated, comparative and comprehensive approach to the study of diversity among ethnic and racial groups and First Nations. A highlight of the program is the internship, which fosters direct links between the university and community-based settings. Both theoretical and applied perspectives are embedded in a curriculum addressing how ethnicity, race and First Nations shape identities, literacies, public policies and communities in local and transnational U.S. contexts. Students identify a career area enabling them to integrate their knowledge with specific course work tied to their career and advanced educational goals.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: Rapid socioeconomic change, changing demographics, increased global competition and rapid cultural diversification have created an increasing need for workers and citizens knowledgeable about diverse ethnic and racial groups. Graduates of the undergraduate Ethnicity, Race, First Nations Studies program will be positioned to enter the workforce and function effectively and critically as informed citizens in a diverse and complex society.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of

Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/majors/erfns
FAB N201
harcs.dept@asu.edu
602-543-4444

## History, BA (ASHISBA)

Campus: WEST

Program Description: The B.A. in history, within the New College of Interdisciplinary Arts and Sciences, trains students in the use of basic tools and methods of the historical discipline. Students are exposed to a broad span of modern history, a wide range of historiographical perspectives and approaches, and such fundamental categories of historical analysis as race, class, gender and ethnicity. Students develop habits of mind associated with history as a discipline. The program consists of several specific core courses and a range of electives and distributional requirements, providing students with a solid foundation in historical methods.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The B.A. in history serves as excellent preparation for study in graduate or professional degree programs and for careers in which critical thinking, research and writing skills are highly valued. This program provides a strong foundation for understanding the forces of change that shape contemporary society, the marketplace, and the lives of individuals and groups, thereby equipping students to negotiate the complex cultural, community and business environments of the 21st century.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/majors/history
FAB N201
harcs.dept@asu.edu
602-543-4444

## Integrative Studies, BA (ASIASBA)

Campus: WEST

Program Description: The B.A. in integrative studies, within the New College of Interdisciplinary Arts and Sciences, prepares students for broad employment alternatives or to pursue graduate studies. As a variation of the classic liberal arts degree, students combine a solid foundation of lower-division courses, followed by upper-division liberal arts courses where students design an area of concentration (using an approved ASU minor or creating a concentration that is completely individualized) unique to their own interests and career pursuits. For example, the concentration can include, but is not limited to:

- Business.
- Communication.
- Criminal justice and pre-professional studies.
- Education and teaching.
- Environmental issues and physical sciences.
- Languages and cultures.
- Social sciences and policy issues.

Flexible and diverse, the program is capped with an internship experience.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: Emphasizing interdisciplinary study combined with a specific area of concentration (e.g., business, communication studies, English, gerontology, history, psychology or pre-professional studies), students tailor their programs to meet individualized career goals. The capstone internship program prepares students to make the transition smoothly to postbaccalaureate employment in business, cultural, educational, community, social sciences and human service settings, as well as to graduate school. Students planning graduate or professional degrees in law, business, helping professions, or in traditional disciplines benefit from the flexibility of this program for a broad range of future academic and career pursuits.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/majors/integrativestudies
FAB N201
harcs.dept@asu.edu
602-543-4444

## Interdisciplinary Arts \& Performance, BA (ASIAPBA)

## Campus: WEST

Program Description: The interdisciplinary arts and performance program (IAP), the only one of its kind in the Southwest, offers a Bachelor of Arts for students focused on an interdisciplinary and collaborative approach to the arts, technology and performance. Core and elective courses are offered in digital media arts, sound/recording arts, theatre/performance practice, visual art and more. The IAP program includes courses on the traditions of 20th- and 21st-century interdisciplinary, avant-garde and experimental arts, and aims toward providing students with an understanding of the genres and directions in contemporary art-making and performance. Teaching and course work in IAP encourages students to develop creatively and to work collaboratively. A senior project allows students to finalize their degree with a substantial artistic venture or to engage in a practical arts-based internship. Graduates enter the art-making world or work in the areas of media, film and education.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: This interdisciplinary arts training can be the basis for a variety of personal and professional pursuits. Students who major in the program receive practical, professional training and solid academic skills. They gain extensive preparation for careers as artists, performers and creative professionals. They also develop critical backgrounds useful for becoming future teachers and scholars. Graduates of the program are prepared for advanced study in the performing arts or arts-related professions in education, art and cultural journalism, government and community arts administration, media services and production.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/majors/iap
FAB N201
harcs.dept@asu.edu

## Life Sciences, BA (ASLSCBA)

Campus: WEST
Program Description: The intricate connections among biology, chemistry and physics form the basis of the life sciences curriculum. The B.A. program emphasizes interdisciplinary learning of the life and physical sciences, emphasizing the connectedness among disciplines. The organization and flexibility of the B.A. encourages students to deeply study another subject outside their major, by encouraging students to double major or minor in another subject area.

## Additional Program Fee: N.

Second Language Requirement: N.

Career Opportunities: Students have a wide variety of career options including: health professional programs, graduate school, laboratory research, science writing, environmental management and conservation, science advisors to businesses and government, and primary and secondary school teaching.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of Division of Mathematical and Natural Sciences
http://newcollege.asu.edu/programs/lifesci/
CLCC 217
Pamela.Marshall@asu.edu
602-543-6143

## Life Sciences, BS (ASLSCBS)

Campus: WEST
Program Description: The intricate connections among biology, chemistry and physics form the basis of the life sciences curriculum. The B.S. program emphasizes experiential learning, and all required core courses have laboratories. By learning in an integrative environment that emphasizes the connectedness of disciplines, students gain a better understanding of larger scientific concepts and can view these concepts from multiple perspectives. Undergraduates have the opportunity to conduct independent research under the mentorship of faculty members or in internships outside of the department.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The B.S. in life sciences prepares students for a wide range of careers by offering course and laboratory work and quantitative research opportunities that develop fundamental problem-solving, critical thinking, writing and communication skills. Graduates may enter careers in laboratory or field research, business, scientific journalism, publishing, teaching and medicine. Other opportunities include working as a laboratory technician or research associate in university and government research laboratories, and hospital and diagnostic laboratories, or working in pharmaceutical, biotechnology, agricultural and food processing companies. Undergraduate laboratory experience, both on- and off-campus, enhances employability in these areas. Students engaged in field studies are prepared for entry-level positions in private companies and state and federal agencies (e.g., wildlife biologist, environmental consultant or conservation officer).

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Mathematical and Natural Sciences

## CLCC 217

MNS.Dept@asu.edu
602-543-6050

## Life Sciences (Environmental Science), BS (ASLSCEBS)

## Campus: WEST

Program Description: The intricate connections among biology, chemistry and physics form the basis of the life sciences curriculum. The B.S. program emphasizes experiential learning, and all required core courses have laboratories. By learning in an integrative environment that emphasizes the connectedness of disciplines, students gain a better understanding of larger scientific concepts and can view these concepts from multiple perspectives. Undergraduates have the opportunity to conduct independent research under the mentorship of faculty members or in internships outside of the department.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.
Career Opportunities: According to the 2010-2011 Occupational Outlook Handbook (US Bureau of Labor Statistics, 2010), employment of Environmental Scientists is expected to grow by 28 percent between 2008 and 2018. This is far more rapid growth than average rate of growth for all occupations. The Handbook indicates that most rapid growth will occur in the private sector (primarily, in private environmental consulting firms).
This concentration will allow students to tailor their courses of study to interests they possess in the science of the environment to help prepare them for careers in both the public and private sectors (e.g. in environmental consulting, environmental remediation, natural resource management, etc.) as well as entry into graduate programs in environmental science and related disciplines.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Mathematical and Natural Sciences
http://newcollege.asu.edu/mns/
CLCC 217
mns@asu.edu
602-543-6050

## Life Sciences (Forensics), BS (ASLSCFBS) <br> Campus: WEST

Program Description: This concentration will allow students interested in the life sciences to focus their courses of study on the field of forensics. Students pursuing this concentration will take a different, more forensics-relevant set of distribution courses than those students pursuing the current B.S. in life sciences. The concentration will prepare students interested in criminal forensics for careers in forensic science and success in graduate and professional degree programs. Much of the required course work will be completed in chemistry and/or biology lab science courses to ensure that graduates of the program are competitive as they enter the workforce, pursue relevant careers (e.g., those in crime labs), and apply to graduate and professional degree programs.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.

Career Opportunities: Graduates of this program will be able to pursue careers not only in forensics laboratories, but also in the research and development of new technologies in forensics. Graduates of this program will be particularly competitive for positions in forensics laboratories because the concentration focuses heavily on chemistry and biology laboratory course work (areas that administrators and current employees in crime labs have reported are critically important). For example, as reliance upon DNA fingerprinting technologies increases, demand for forensic scientists trained in the requisite amounts of molecular biology will increase. The concentration also places focus on oral communication skills (e.g., through course work in argumentation, COM 222 or 422), which will prepare graduates for the multifaceted aspects of their careers in forensics (e.g., providing articulate and compelling expert testimony in criminal trials). Graduates of this program will also be well-positioned to enter graduate programs in forensics.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Mathematical and Natural Sciences
http://newcollege.asu.edu/mns/
CLCC 217
mns@asu.edu
602-543-6050

## Political Science, BA (ASPOLBA)

Campus: WEST

Program Description: Students gain understanding of theory, practice and policy underlying political processes, locally, nationally and internationally, in the B.A. in political science program. The degree trains students in research skills necessary for analysis of complex sociopolitical issues locally and globally. Course work is learner-centered in political theory, American political institutions, international relations and world affairs. This is a flexible program focusing on international, urban, and race/ethnic sociopolitical areas, internships, and service-learning/action research opportunities with emphasis on intellectual and concrete policy issues in the greater Phoenix metropolitan area, Arizona, the Arizona-Mexico borderlands, the Americas and the world.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: $N$.
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The political science curriculum provides a solid background for employment in a relevant profession and prepares students for graduate work in political science, social science disciplines, urban planning or in professional schools. The program serves as a good precursor to staff, manager or policy analyst positions in local, state and federal government. This degree is recognized as qualification for many careers in business (for-profit and nonprofit) and industry. Work may include binational, cross-border positions linking U.S. and Mexican businesses, Arizona-Sonora local government or local community groups on both sides of the border. Many students use the degree as a gateway to law school or basis for further study in such applied fields as urban affairs/urban and regional planning, public administration, public policy or community development.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/politicalscience
FAB S105
SBS.Dept@asu.edu
602-543-6058

## Political Science, BS (ASPOLBS)

Campus: WEST

Program Description: Students gain understanding of theory, practice and policy underlying political processes, locally, nationally and internationally, in the B.S. in political science program. The degree trains students in research skills necessary for analysis of complex sociopolitical issues locally and globally. Course work is learner-centered in political theory, American political institutions, international relations and world affairs. This is a flexible program focusing on international, urban, race/ethnic sociopolitical areas, internships and service-learning/action research opportunities with emphasis on intellectual and concrete policy issues in the greater Phoenix metropolitan area, Arizona, the Arizona-Mexico borderlands, the Americas and the world. The B.S. requires six more credit hours than the B.A.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The political science curriculum provides a solid background for employment in a relevant profession and prepares students for graduate work in political science, social science disciplines, urban planning or in professional schools. The program serves as a good precursor to staff, manager or policy analyst positions in local, state and federal government. This degree is recognized as qualification for many careers in business (for-profit and nonprofit) and industry. Work may include binational, cross-border positions linking U.S. and Mexican businesses, Arizona-Sonora local government or local community groups on both sides of the border. Many students use the degree as a gateway to law school or basis for further study in such applied fields as urban affairs, urban and regional planning, public administration, public policy or community development.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/politicalscience
FAB S105
SBS.Dept@asu.edu
602-543-6058

## Psychology, BA (ASPGSBA)

Campus: ONLNE, WEST
Program Description: Psychology is the scientific study of the behavior and mental processes of individuals and groups. The diverse B.A. curriculum in psychology, within the New College of Interdisciplinary Arts and Sciences, consists of basic and applied courses covering multiple perspectives within the field, including clinical, cognitive systems/behavioral neuroscience, cross-cultural, developmental, organizational and social psychology. Courses are presented in the context of cultural, socio-historical and transnational issues, enabling the student to understand the relationship between psychology and other social and behavioral sciences. This program adds practical experiences to enrich study through service learning, internships and research with faculty members. Strong emphasis is placed on developing skills in critical thinking and reasoning, quantitative and qualitative research methods, and writing to round out preparation for a career or for graduate studies.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 117 College Algebra.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Central Arizona College, Cochise College, Coconino Community College, Maricopa County Community College District, Mohave Community College, Pima Community College, Yavapai College.

Career Opportunities: A degree in psychology will prepare students for a career in mental health professions (e.g., youth counselor, substance abuse counselor), social services (e.g., high school psychology teacher, occupational analyst) and government (e.g., sales and marketing, human resources management). The degree also provides an excellent foundation for graduate study in fields such as public administration, law, family studies, communication and the various graduate programs in psychology:

- Clinical and counseling.
- Cognitive neuroscience.
- Developmental.
- Environmental.
- Experimental.
- Physiological.
- Social.


## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/psychology
FAB S105
SBS.Dept@asu.edu
602-543-6058

## Psychology, BS (ASPGSBS)

Campus: WEST
Program Description: Psychology is the scientific study of the behavior and mental processes of individuals and groups. The B.S. in psychology, within the New College of Interdisciplinary Arts and Sciences, consists of basic and applied courses covering multiple perspectives within the field, including clinical, cognitive systems/behavioral neuroscience, cross-cultural, developmental, organizational and social psychology. Courses are presented in the context of cultural, socio-historical and transnational issues, enabling the student to understand the relationship between psychology and other social and behavioral sciences.
This program adds practical experiences to enrich study through service learning, internships and research with faculty members. Strong emphasis is placed on developing skills in critical thinking and reasoning, quantitative and qualitative research methods, and writing to round out preparation for a career or graduate studies. The B.S. program is distinguished from the B.A. in that it requires two additional lab sciences (a life science and a physical science) and MAT 210 Brief Calculus.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 117 College Algebra.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Central Arizona College, Cochise College, Maricopa County Community College District, Mohave Community College, Pima Community College.

Career Opportunities: A B.S. in psychology will prepare students for a career in mental health professions (e.g., youth counselor, substance abuse counselor), social services (e.g., high school psychology teacher, occupational analyst) and government (e.g., sales and marketing, human resources management). The degree also provides an excellent foundation for graduate study in fields such as public administration, law, family studies, communication and the various graduate programs in psychology:

- Clinical and counseling.
- Cognitive neuroscience.
- Developmental.
- Environmental.
- Experimental.
- Physiological.
- Social.


## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/psychology
FAB S105
SBS.Dept@asu.edu
602-543-6058

## Religion \& Applied Ethics Studies, BA (ASRELBA)

Campus: WEST
Program Description: Many people make ethical decisions in the context of their religious beliefs or world views. By combining the disciplines of religion and applied ethics studies, students are able to analyze problems more realistically. Students in the B.A. in religion and applied ethics studies program, within the New College of Interdisciplinary Arts and Sciences, learn the applicable religious contexts for understanding why people choose to live or respond to ethical issues as they do. They learn to identify moral problems developing in society, to develop the tools needed to formulate and critically evaluate various responses, and to make careful and informed decisions about ethical matters in contemporary life. The religion and applied ethics studies program is capped with a thesis and internship experience.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: $N$.
Second Language Requirement: $N$.
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates can anticipate opportunities in the following fields, explored through their required internships:

- Business.
- Criminal justice.
- Education.
- Government.
- Human resources.
- Law.
- Law enforcement.
- Media.
- Medicine.
- Religious organizations.
- Social services.


## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/majors/religion
FAB N201
harcs.dept@asu.edu
602-543-4444

## Social and Behavioral Sciences, BA (ASSBSBA)

Campus: WEST
Program Description: The social and behavioral sciences curriculum provides an understanding of assumptions underlying the social and behavioral sciences, develops research skills necessary for analysis of complex social issues, offers a flexible program tailored to the career goals of the individual student, and offers both individual and group experiences in working with faculty on concrete intellectual and policy issues. The core courses provide students a background suitable to helping them better understand psychological and/or social principles related to the behavior of individuals across multiple social contexts and institutions (e.g., family, community, society and culture).

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 119 Finite Mathematics.
Career Opportunities: The interdisciplinary degree is an excellent means toward creating a degree program that matches the individual's interests and fulfills many employers' expectations of a baccalaureate degree, namely that it should expose the student to a variety of outlooks and challenges. Such a degree will be competitive in most situations where the disciplinary social and behavioral degrees are accepted and is advantageous when seeking entry to broad professional programs such as regional planning or urban studies.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/sbs
FAB N251
SBS.Dept@asu.edu
602-543-6058

## Social \& Behavioral Sciences, BS (ASSBSBS) Campus: WEST

Program Description: The social and behavioral sciences curriculum provides an understanding of assumptions underlying the social and behavioral sciences; develops research skills necessary for analysis of complex social issues; offers a flexible program tailored to the career goals of the individual student; and offers both individual and group experiences in working with faculty on concrete intellectual and policy issues. The core courses provide students a background suitable to helping them better understand psychological and/or social principles related to the behavior of individuals across multiple social contexts and institutions (e.g., family, community, society and culture).

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 119 Finite Mathematics.

Career Opportunities: The interdisciplinary degree is an excellent means toward creating a degree program that matches the individual's interests and fulfills many employers' expectations of a bachelor's degree, namely, that it should expose the student to a variety of outlooks and challenges. Such a degree will be competitive in most situations where the disciplinary social and behavioral degrees are accepted and is advantageous when seeking entry to broad professional programs such as regional planning or urban studies.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/sbs
FAB S105
SBS.Dept@asu.edu
602-543-6058

## Sociology, BA (ASSOCBA)

## Campus: WEST

Program Description: The B.A. curriculum in sociology, within the New College of Interdisciplinary Arts and Sciences, provides an understanding of theory, practice and policy underlying issues of social change, inequality and diversity from multiple perspectives, including race/ethnicity, gender, economic position, age, geographic location and position in the global political economy.
The program enhances students' understanding of social realities and institutions at local, national and international levels, and how sociology contributes to the other social sciences and to the humanities. Students gain a basic understanding of assumptions underlying the discipline of sociology and develop the research skills necessary for analysis of complex social issues. This is a flexible program with opportunities to work collaboratively with faculty on concrete intellectual and policy issues.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates apply the sociological perspective to a wide variety of jobs in business, the health professions, the criminal justice system, social services and government. Course work in sociology provides a valuable preparation for careers in journalism, politics, public relations or public administration, all fields that involve investigative skills and an ability to work with diverse groups. Graduates with an advanced degree in sociology may become:

- Community developers.
- Criminologists.
- Demographers.
- Gerontologists.
- Research analysts.
- Statisticians.
- Survey researchers.
- Urban planners.


## Contact Information:

Interdisciplinary Arts \& Sciences, New College of Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/sociology
FAB S105
SBS.Dept@asu.edu
602-543-6058

## Sociology, BS (ASSOCBS)

## Campus: WEST

Program Description: The B.S. curriculum in sociology within the New College of Interdisciplinary Arts and Sciences provides an understanding of theory, practice, and policy underlying issues of social change and of inequality and diversity from multiple
perspectives, including race/ethnicity, gender, economic position, age, geographic location and position in the global political economy. The program enhances students' understanding of social realities and institutions at local, national and international levels, and how sociology contributes to the other social sciences and to the humanities. Students gain basic understanding of assumptions underlying the discipline of sociology and develop the research skills necessary for analysis of complex social issues. The B.S. program requires six more credit hours of methods courses (both qualitative and quantitative) than the B.A. This is a flexible program with individual and group experiences in working with faculty on concrete intellectual and policy issues.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates apply the sociological perspective to a wide variety of jobs in business, the health professions, the criminal justice system, social services and government. A valuable preparation for careers in journalism, politics, public relations or public administration, all fields that involve investigative skills and an ability to work with diverse groups. Graduates with an advanced degree in sociology may become:

- Community developers.
- Criminologists.
- Demographers.
- Gerontologists.
- Research analysts.
- Statisticians.
- Survey researchers.
- Urban planners.


## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/sbs/degrees/sociology
FAB S105
SBS.Dept@asu.edu
602-543-6058

## Spanish, BA (ASSPABA)

Campus: WEST

Program Description: The B.A. in Spanish program, within the New College of Interdisciplinary Arts and Sciences, emphasizes Spanish language, literature and culture, all of which are integrated within the discipline and with other disciplines within the college.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The Spanish program offers excellent preparation for graduate school or for employment as a teacher in either the elementary or secondary school system, especially in those districts where bilingual programs are integral to the curricula. Outside the education system, students majoring in Spanish can find employment as translators and interpreters in:

- Social agencies.
- Federal and state courts.
- Diplomatic corps.
- Law enforcement agencies.
- Law firms.

The business world also provides employment for those fluent in Spanish. This is especially true in the Southwest, with its proximity to Mexico, and through new outlets opened by the tri-national North American Free Trade Agreement.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/majors/spanish
FAB N201
harcs.dept@asu.edu
602-543-4444

## Statistics, BS (ASSTABS)

Campus: WEST
Program Description: The B.S. in statistics prepares students for entry level positions as statisticians and for graduate training in statistics and related fields. Statistics is the science of collection, description, analysis and interpretation of data from experiments or surveys. Statisticians help to make decisions and solve problems in the face of uncertainty, using the limited data available from an experiment or survey. Because the use of statistical methods is common in all areas of business, government, natural and social sciences, the demand for individuals with all levels of statistical training is great. The program encompasses both theoretical and applied statistics, as well as the requisite foundations in mathematics and computing. The emphasis is on the more practical and applied aspects of statistics. Graduates of this program are equipped to utilize statistical techniques to explore interdisciplinary topics that span disciplines. These unique features emphasize the interdisciplinary nature of statistics and prepare graduates for employment as entry level statisticians or for graduate school.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: $N$.

Second Language Requirement: N .
First Required Math Course: MAT 270 Calculus w/Analytic Geometry I.

Career Opportunities: Statisticians are in high demand in many areas of industry, government, and academia. Some areas with particularly high demand include pharmaceutical, medical, manufacturing, and financial jobs.

## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Mathematical and Natural Sciences
http://newcollege.asu.edu/mns/
CLCC 217
mns@asu.edu
602-543-6050

## Campus: WEST

Program Description: The B.A. in women and gender studies, within the New College of Interdisciplinary Arts and Sciences, is an interdisciplinary program emphasizing intersectional approaches to the study of gender, race, class, ethnicity and sexuality in national and transnational contexts. Consistent with the university's design imperatives of social embeddedness and use-inspired research, the B.A. in women and gender studies, through its course offerings, research initiatives and co-curricular programs, seeks to further the understanding of women and gender, and to promote social justice.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The women and gender studies program builds a solid educational foundation, providing knowledge and critical thinking skills needed to deal with changing gender roles in society. The program also prepares students for opportunities in many settings:

- Business and professional schools.
- Education and training.
- Graduate study in the humanities and social sciences.
- Health care services.
- Human resources development.
- Public and business administration.
- Social services.


## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/majors/womenstudies
FAB N201
harcs.dept@asu.edu
602-543-4444

## Women and Gender Studies, BS (ASWSTBS)

## Campus: WEST

Program Description: The B.S. in women and gender studies, within the New College of Interdisciplinary Arts and Sciences, is an interdisciplinary program emphasizing intersectional approaches to the study of gender, race, class, ethnicity and sexuality in national and transnational contexts. Consistent with the university's design imperatives of social embeddedness and use-inspired research, the B. S. in women and gender studies, through its course offerings, research initiatives and co-curricular programs, seeks to further the understanding of women and gender, and to promote social justice. The B.S. program is distinguished by its quantitative emphasis.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: WEST campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Career Opportunities: The women and gender studies program builds a solid educational foundation, providing knowledge and critical thinking skills needed to deal with changing gender roles in society. The program also prepares students for opportunities in many settings:

- Business and professional schools.
- Education and training.
- Graduate study in the humanities and social sciences.
- Health care services.
- Human resources development.
- Public and business administration.
- Social services.


## Contact Information:

Interdisciplinary Arts \& Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/harcs/degrees/majors/womenstudies
FAB N201
harcs.dept@asu.edu
602-543-4444

## Nursing and Health Innovation, College of

## Nursing, BSN (NUNURDBSN)

Campus: DTPHX, ONLNE
Program Description: Through a curriculum based upon evidence-based practice, clinical reasoning, innovation, interprofessional communication, and information technology, the B.S.N. program prepares students to provide the highest quality of professional nursing care. General education course work within the curriculum, including the sciences, cultural diversity, global and historical awareness, literacy and critical inquiry, mathematical studies, social and behavioral sciences and the humanities, provides a strong foundation for the nursing theory and clinical/experiential courses.
The B.S.N. program offers two concentrations. The R.N.-B.S.N. concentration offers registered nurses and recent associate/diploma nursing graduates the opportunity to complete upper division nursing course work that will earn the student a baccalaureate degree in nursing.

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 142 College Mathematics.

## Admission Requirements:

Traditional Pre-licensure Clinical Nursing Program Concentration
This program is only offered at the Downtown Phoenix campus.
Applicants who do not have an associate degree in nursing or a nursing diploma and do not have their R.N. license will apply to the Traditional Pre-licensure Clinical Nursing Program and will be reviewed by the Nursing Admissions Committee on an individual basis. Students must meet the following minimum criteria to be considered by the committee:
Freshman resident: 3.00 ABOR GPA or 500 GED, and either a 1040 SAT or 22 ACT score, or in the top 25 percent of high school graduating class.
Freshmen non-resident: 3.00 ABOR GPA or 500 GED and either an 1110 SAT or 24 ACT score, or in the top 25 percent of high school graduating class.
Transfer resident and non-resident: cumulative transfer GPA of 3.50.
Admission is competitive so early application is recommended.
R.N.-B.S.N. Concentration

This program is only offered as an online option.
Applicants must meet university minimum admission requirements.
Students who have not signed the community college pathway agreement need 1) a 2.50 GPA, and 2) ENG 101, ENG 102, and a statistic course. For additional requirements, please see
https://nursingandhealth.asu.edu/files/programs/nursing/undergraduate/rnbsn/application.pdf.

Students who have signed the community college pathway agreement need 1) a 2.50 GPA in the following courses: BIO 201, BIO 202, CHM 101, ENG 101, ENG 102, MIC 205, PGS 101 or CDE 232, and 2) a statistic course. For additional requirements, please see https://nursingandhealth.asu.edu/files/programs/nursing/undergraduate/rnbsn/application.pdf.
Additional information available at http://asuonline.asu.edu/nursingonline, or call 877-511-3830.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Eastern Arizona College.

Career Opportunities: Graduates deliver nursing care to individuals, families and communities. B.S.N. graduates are eligible to sit for the national licensing examination for registered nurses. Completion of this degree program also prepares individuals for entrance into graduate study in nursing at the master's degree level, which is essential for teaching, administration, clinical specialization and nursing research.

## Contact Information:

Nursing \& Health Innovation, College of
College of Nursing \& Health Innovation
http://nursingandhealth.asu.edu/
NHI 2
nursing@asu.edu
602-496-0852

## Nutrition and Health Promotion, School of <br> Applied Science (Food Service Management), BAS (ECNTRBAS)

Campus: DTPHX, POLY

Program Description: The B.A.S. program is a flexible, 60-credit-hour degree designed specifically for students who have earned an A.A.S. from a regionally accredited institutions. In completing the B.A.S., students complete all ASU graduation requirements. The concentration in food service management is aimed at those students with a specialty in culinary or hospitality science.

## Additional Program Fee: N. <br> Second Language Requirement: N.

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree. Not available for freshmen.

Career Opportunities: This degree prepares students for careers in food production, service, management and marketing. With additional education and/or professional training, students may also become credentialed as certified dietary managers, school food service and nutrition specialists or registered sanitarians.

## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/programs/nutrition
HSC 1386
healthpromotion@asu.edu
480-727-1333

## Applied Science (Health Sciences), BAS (NUHSCBAS)

Campus: DTPHX, ONLNE
Program Description: The B.A.S. program is a flexible, 60-credit-hour degree designed specifically for students who have earned an A.A.S. from a regionally accredited institutions. In completing the B.A.S., students complete all ASU graduation requirements. The concentration in health sciences is designed to provide the academic knowledge and skills to allow students with an A.A.S. degree from a previously-approved health related program to advance their employment opportunities within the health field and/or continue into a graduate program of study.

## Additional Program Fee: N.

Second Language Requirement: N.

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree. Not available for freshmen.

Career Opportunities: With the completion of the B.A.S. with a concentration in health sciences, graduates will be able to return to their original area of expertise in allied health (i.e., radiology, nuclear imaging) and qualify for a managerial position, as an educator/instructor within their field of expertise, and/or a higher position grade within their current place of employment. Other career options include positions such as:

- Elder services program coordinator.
- Health/patient educator.
- Healthy Start coordinator.
- HMO/insurance company client coach.
- Home health care coordinator.
- Longterm care health/wellness coordinator.
- School health and program specialist.
- WIC/Community nutrition aide.


## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/
MERC C250
healthpromotion@asu.edu
602-496-0888

## Exercise \& Wellness (Exercise \& Wellness), BS (ECEXWBS)

Campus: DTPHX, POLY

Program Description: The B.S. in exercise and wellness with a concentration in exercise and wellness provides student with the knowledge, skills and professional expertise to assist individuals across the lifespan in adopting physical activity and other healthy behaviors that lead to increased fitness, wellness and optimal health.
The exercise and wellness concentration prepares students in:

- Fitness and wellness behaviors to varied populations.
- The knowledge, skills, and ethics for instructing, assessing, prescribing, and promoting.
- Methods for promoting health behavior change.
- The sciences of cardiovascular and muscular fitness, nutrition, and stress management.

Students are exposed to the latest research and practices designed to enhance fitness and wellness through both laboratory and field experiences.
Distinctive features of the exercise and wellness concentration include an outstanding capstone internship that provides preprofessional experience in the fitness, wellness and health industry both locally and nationally, and a focus on practical hands-on application of knowledge and skills learned throughout the program.
The preparation and internship in this program prepares students for multiple career opportunities across fitness and wellness industries and health promotion settings as well as further graduate study in such fields as exercise science, physical therapy, dentistry and medicine.
Students offered admission into this degree program will pursue the degree on the Downtown Phoenix campus beginning in Fall 2011.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Eastern Arizona College, Maricopa County Community College District.

Career Opportunities: Students who complete a B.S. degree in the exercise and wellness concentration will have enhanced opportunities in fitness and wellness employment settings because clients and employers prefer to work with people who more highly prepared and qualified.
Example Careers: Undergraduates in this concentration often pursue careers in such fields as:

- Active adult planned community fitness and health promotion.
- Cardiac rehabilitation.
- Country club fitness.
- Hospital based fitness centers.
- Personal trainers.
- Spa fitness.
- Sports medicine clinics.
- Strength and conditioning coach.
- Wellness centers.
- Worksite fitness and health promotion.

Graduates may pursue further graduate study in such fields as:

- Exercise science.
- Medical school.
- Physician assistant.
- Physical therapy.


## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/programs/wellness/undergraduate/index.htm
MERC C250
healthpromotion@asu.edu
602-496-0888

## Exercise \& Wellness (Health Promotion), BS (ECEXWHBS)

Campus: DTPHX, POLY
Program Description: The B.S. in exercise and wellness with a concentration in health promotion provides students with the knowledge, skills and expertise to assist individuals across their lifespan in adopting healthy lifestyles.
The health promotion concentration focuses on the development and delivery of programs that enhance awareness about healthy lifestyle behavior, increasing health-enhancing behaviors, decrease health risk behaviors and create environments supportive of healthy lifestyles.
Students are prepared in:

- Designing, implementing, administering and evaluating effective health promotion.
- Foundational knowledge in nutrition, physical activity, stress and substance abuse as they relate to health and chronic disease prevention.
- Methods for promoting health behavior change.
- Professional knowledge, skills and ethics for assessing group and community health needs.

Distinctive features of the health promotion concentration include an outstanding capstone internship that provides preprofessional experience in health promotion settings and a focus on application of the knowledge and skills learned throughout the program.
Students offered admission into this degree program will pursue the degree on the Downtown Phoenix campus beginning in Fall 2011.

Additional Program Fee: $N$.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The rising cost of health care has increased the need for individuals in health promotion. As health care costs continue to rise, insurance companies, employers, and governments are attempting to find ways to curb costs. One of the more cost-effective ways is to employ health promotion professionals to teach people how to live healthy lives and avoid costly treatments for illnesses. Health promotion professionals work in various environments based on the industry in which they are employed. In public health, nonprofit organizations, corporations and businesses, colleges and universities, and medical care settings, they primarily work in offices. However, they may spend a lot of time away from the office implementing and attending programs, meeting with community organizers, speaking with patients, or teaching classes.
Example Careers: Undergraduates in this concentration often pursue careers in such fields as:

- College and university wellness and health promotion.
- Government health departments and agencies.
- Health coaching.
- Non-profit disease prevention agencies.
- Private health care organizations.
- Wellness centers.
- Worksite health promotion.

Graduates may pursue further graduate study in such fields as:

- Dental school.
- Health education.
- Health promotion.
- Health psychology.
- Medical school.
- Physician assistant.
- Public health.


## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/programs/wellness/undergraduate/index.htm
MERC C250
healthpromotion@asu.edu
602-496-0888

## Health Sciences (Health Policy), BS (NUHSCHPBS)

Campus: DTPHX

Program Description: The B.S. in health sciences is designed to provide the academic knowledge and skills to allow students to move directly into a range of employment opportunities within the health field and/or continue their education in discipline-specific programs. Students will complete a complement of core courses that emphasize ethics, communication skills, critical thinking and cultural awareness. The program includes three unique concentrations: pre-professional, healthy lifestyle coaching and health policy.
The health policy concentration is targeted toward students interested in the community policy aspects of disease prevention and health promotion. The continuum of health care now spans a diverse array of health providers ranging from private practitioner offices and outpatient care centers to residential care facilities and acute care hospitals. Key to the enhancement of health care within the U.S. is the development and implementation of innovative, cost effective and universally accessible programs. Students in this concentration will be required to complete a supervised practicum, providing hands-on experience within their field of interest. Students may also wish to consider using their electives to complete a minor in nonprofit administration, which requires a total of 15 credits.

Additional Program Fee: N.
Second Language Requirement: $N$.
First Required Math Course: MAT 142 College Mathematics.

Career Opportunities: Career opportunities are available in city, county and/or state departments of health, with additional employment opportunities in the health insurance industry, non-profit sector and within various corporate entities providing health care.

## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/programs/healthsciences
MERC C250
healthpromotion@asu.edu
602-496-0888

## Health Sciences (Healthy Lifestyles Coaching), BS (NUHSCHLCBS)

Campus: DTPHX
Program Description: The B.S. in health sciences is designed to provide the academic knowledge and skills to allow students to move directly into a range of employment opportunities within the health field and/or continue their education in discipline-specific programs. Students will complete a complement of core courses that emphasize ethics, communication skills, critical thinking and cultural awareness. The program includes three unique concentrations: pre-professional, healthy lifestyles coaching and health policy.
The healthy lifestyles coaching concentration is targeted towards students who have a broad interest in health education and are seeking immediate employment in the community health education/health promotion field.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: Career options include positions such as:

- Elder service/congregate meal program coordinator.
- Health/patient educator.
- Healthy start coordinator.
- School health and nutrition program specialist.
- Women, infants and children/community nutrition aide.


## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/programs/healthsciences
MERC C250
healthpromotion@asu.edu
602-496-0888

## Health Sciences (Pre-professional), BS (NUHSCPREBS) <br> Campus: DTPHX

Program Description: The B.S. in health sciences is designed to provide the academic knowledge and skills to allow students to move directly into a range of employment opportunities within the health field and/or continue their education in discipline-specific programs. Students will complete a complement of core courses that emphasize ethics, communication skills, critical thinking and cultural awareness. The program includes three unique concentrations: pre-professional, healthy lifestyle coaching and health policy.
The pre-professional concentration is targeted towards students planning on entering medical, dental, osteopathic, physical therapy, veterinary, pharmacy and similar professional schools. In addition to a comprehensive core of basic science courses, the concentration is unique in that it will provide a solid base in ethics, communication, the evaluation of research (the cornerstone of evidence-based practice) and healthy lifestyles (the foundation of health promotion and chronic disease risk reduction avenues of health care), including the role of complementary and alternative care within the U.S. health care system. Students will also have the ability to incorporate electives that contribute to their knowledge of and sensitivity to the needs of populations impacted by health disparities.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 251 Calculus for Life Sciences.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: If not entering an advanced degree program in the medical field, employment opportunities include:

- Clinical research coordinator.
- Health officer
- Laboratory scientist.
- Sales/marketing representative for pharmaceutical and/or medical device companies.


## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/programs/healthsciences
MERC C250
healthpromotion@asu.edu
602-496-0888

## Kinesiology, BS (NUKINBS)

Campus: DTPHX, TEMPE

Program Description: Kinesiology is a discipline emphasizing the study of movement as it relates to physical activity, health and disease prevention, exercise and sport. Using both human and animal models and reflecting research ranging from basic to applied, it draws from an interdisciplinary body of knowledge grounded in the biological, psychological, physical and social sciences. Undergraduate students in the program gain a disciplinary knowledge of the anatomical, biomechanical, developmental, neural, physiological and psychological mechanisms underlying human movement.
Campus Location: Students admitted to the kinesiology program prior to Fall 2011 will attend classes at the Tempe campus. Beginning Fall 2011, all admitted students will attend classes at the Downtown Phoenix campus.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.

Admission Requirements: Fall 2010
All applicants must meet university minimum admission requirements.
Effective Spring 2011
Freshmen admission:

- Have a minimum ABOR GPA of 3.30; and high school class rank in the top 15th percentile; or an SAT score of 1140 or higher or an ACT score of 25 or higher.
- Meet math competency (Four years Math, including Algebra 1, Geometry, Algebra II and one course requiring Algebra II as a prerequisite)
Transfer students with fewer than 24 transferable college credit hours:
- Admissions will be based on the standards used for freshmen admission.

Transfer students with greater than 24 transferable college credit hours:

- Minimum transfer GPA of 3.30 or higher.

Please note: The Major Map posted is for the 2010-2011 academic year. The kinesiology B.S. is undergoing curricular changes. Students admitted for Fall 2011 and Spring 2012 will be under the 2011-2012 catalog year and subject to the new curriculum and 2011-2012 Major Map.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: An undergraduate degree in kinesiology prepares students for graduate study in a variety of clinical and research settings including:

- Chiropractic.
- Dentistry.
- Kinesiology.
- Medical School.
- Occupational Therapy.
- Physician Assistant.
- Physical Therapy.


## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/advising/kinesiology.htm
PEBW 218
kinesiology@asu.edu
480-965-3875

## Nutrition (Dietetics), BS (ECNTRDBS)

Campus: DTPHX, POLY
Program Description: The dietetics concentration, under the B.S. in nutrition, provides all of the academic course work a student needs to qualify to become a registered dietitian (R.D.). A registered dietitian is a food and nutrition expert who has met the minimum academic and professional requirements to qualify for the credential. In addition to a core of professional nutrition courses, students must complete a broad range of science, management and communication classes. The program emphasizes the application of nutrition within clinical, community, food production and wellness sites. Graduates of the program can apply to complete a dietetic internship, which will further prepare them to take the exam to become an R.D. The dietetics program is currently granted accreditation by the Commission on Accreditation for Dietetics Education of the American Dietetic Association. Students offered admission into this degree program will pursue the degree at either the Polytechnic or Downtown Phoenix campus, based on the following criteria:

- Students admitted immediately after earning a high school diploma, regardless of any earned college credit (or who have not attended any college since high school graduation), will pursue the program at the Downtown Phoenix campus.
- Students admitted after attending community college or another university will pursue the program at the Polytechnic campus, and will be reviewed by an advisor to determine their level of progression in the program.

Students who will not be enrolling in upper-division courses in the major may have their campus changed to the Downtown Phoenix campus, and may pursue the program at that campus, if it is deemed possible by an academic advisor.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The nutrition/dietetics field provides employment opportunities in:

- Consulting.
- Education.
- Food/nutrition marketing and sales.
- Hospitals and other healthcare facilities.
- Nutrition/health promotion.
- Public health agencies.
- School food services.


## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/programs/nutrition
MERC C250
healthpromotion@asu.edu
602-496-0888

## Nutrition (Food \& Nutrition Management), BS (ECNTRMBS)

Campus: DTPHX, POLY
Program Description: The food and nutrition management concentration in the B.S. in nutrition is designed to provide students with an understanding of the food industry and the ability to apply nutrition principles to food production. Students will be able to manage and market food and develop a food or menu that meets a specific nutrition guideline.
Students offered admission into this degree program will pursue the degree at either the Polytechnic or Downtown Phoenix campus, based on the following criteria:

- Students admitted immediately after earning a high school diploma, regardless of any earned college credit (or who have not attended any college since high school graduation), will pursue the program at the Downtown Phoenix campus.
- Students admitted after attending community college or another university will pursue the program at the Polytechnic campus, and will be reviewed by an advisor to determine their level of progression in the program.

Students who will not be enrolling in upper-division courses in the major may have their campus changed to the Downtown Phoenix campus, and may pursue the program at that campus, if it is deemed possible by an academic advisor.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: This degree prepares students to become food service directors at schools, health care facilities and corporate food service operations. Our graduates aspire to own restaurants or nutrition-related businesses, work in supplement or pharmaceutical sales, or work in food marketing and distribution.

## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/programs/nutrition
MERC C250
healthpromotion@asu.edu
602-496-0888

## Nutrition (Human Nutrition), BS (ECNTRHBS)

Campus: DTPHX, POLY
Program Description: The human nutrition concentration, under the B.S. in nutrition, provides students with a strong foundation in nutrition and science, leading to medical school or health professions. Students from this program have gone on to study:

- Dentistry.
- Naturopathic medicine.
- Optometry and podiatry.
- Osteopathic medicine.
- Pharmacy.
- Physician assistants.

The focus on human nutrition offers students all of the science course work they need to succeed in continued educational opportunities. Course work includes anatomy, physiology, chemistry and microbiology. Students gain knowledge of nutritional concepts that health care professionals sometimes lack.
Students offered admission into this degree program will pursue the degree at either the Polytechnic or Downtown Phoenix campus, based on the following criteria:

- Students admitted immediately after earning a high school diploma, regardless of any earned college credit (or who have not attended any college since high school graduation), will pursue the program at the Downtown Phoenix campus.
- Students admitted after attending community college or another university will pursue the program at the Polytechnic campus, and will be reviewed by an advisor to determine their level of progression in the program.

Students who will not be enrolling in upper-division courses in the major may have their campus changed to the Downtown Phoenix campus, and may pursue the program at that campus, if it is deemed possible by an academic advisor.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The nutrition field provides employment opportunities in health care, public health, education, food service, food/nutrition marketing and sales, and nutrition/health promotion and consulting. Graduates of the human nutrition program often go on to apply to other health education or M.S. programs. The area of research is also a good fit for nutrition majors. Several outstanding scientists have received their bachelor's degree from this program; add a master's degree or a Ph.D. and the opportunities within the research field are unlimited.

## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/programs/nutrition
MERC C250
healthpromotion@asu.edu
602-496-0888

## Nutrition (Nutrition Communication), BS (ECNTRCBS)

Campus: DTPHX, POLY

Program Description: The nutrition communication concentration, under the B.S. in nutrition, was developed in collaboration with the Walter Cronkite School of Journalism and Mass Communication. While focusing on human nutrition, students take classes designed to build a foundation toward becoming expert communicators on issues related to food and nutrition. Nutrition courses provide the content for articles that students write in their communication classes. This degree program provides students with a strong understanding of the scientific method, statistics, nutrition, healthcare, fitness and wellness that many traditional journalists lack. Faculty members teach students how to avoid sensationalism or sacrificing reality to get a better story.
Students offered admission into this degree program will pursue the degree at either the Polytechnic or Downtown Phoenix campus, based on the following criteria:

- Students admitted immediately after earning a high school diploma, regardless of any earned college credit (or who have not attended any college since high school graduation), will pursue the program at the Downtown Phoenix campus.
- Students admitted after attending community college or another university will pursue the program at the Polytechnic campus, and will be reviewed by an advisor to determine their level of progression in the program.

Students who will not be enrolling in upper-division courses in the major may have their campus changed to the Downtown Phoenix campus, and may pursue the program at that campus, if it is deemed possible by an academic advisor.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The nutrition communication field offers employment opportunities with newspapers, magazines, Web-based corporations, community and healthcare agencies and private corporations (e.g., public relations firms). With this degree, graduates can pursue careers as authors, freelance writers for newspapers and magazines, public relations representatives for food and beverage companies or consultants in program or product development.

## Contact Information:

Nutrition and Health Promotion, School of
School of Nutrition and Health Promotion
http://nursingandhealth.asu.edu/programs/nutrition
MERC C250
healthpromotion@asu.edu
602-496-0888
Public Programs, College of

## Criminal Justice \& Criminology, BS (PPCRIMJBS)

Campus: DTPHX, ONLNE

Program Description: The study of criminal justice and criminology involves analysis of the theories, laws, policies and practices associated with understanding criminal and delinquent behavior, the law and the response to violations of law. The program provides an interdisciplinary social science perspective to the study of crime and criminal justice. The focus is on:

- Criminal justice policies and practices.
- The nature of crime and criminological theory.
- The various components of the criminal justice system including law enforcement, corrections and the courts.

Students receive a solid foundation of course work that provides the content, analytical and communication skills required for working in complex criminal justice occupations.
The School of Criminology and Criminal Justice administers the program from the Downtown Phoenix campus. While most criminal justice and criminology courses are offered on that campus, students may also take criminal justice and criminology courses at the Tempe Campus and Online.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Arizona Western College, Central Arizona College, Cochise College, Coconino Community College, Eastern Arizona College, Maricopa County Community College District, Mohave Community College, Pima Community College, Yavapai College.

Career Opportunities: Graduates of the criminal justice and criminology program find a strong job market in the public and private sectors. Employment opportunities exist in the areas of:

- Corrections.
- Court personnel.
- Law enforcement.
- Legal offices.
- Parole.
- Private security.
- Probation.
- Victim advocate agencies.

Graduates may also pursue advanced degrees in law, criminology and criminal justice and other social science disciplines.

Contact Information:

Public Programs, College of
School of Criminology and Criminal Justice
http://ccj.asu.edu/
UCENT 600
sccj@asu.edu
602-496-2356

## Nonprofit Leadership \& Management, BS (PPNLMBS)

Campus: DTPHX
Program Description: Through the B.S. in nonprofit leadership and management program, students are empowered to become successful professionals who positively impact the community in which they work. The nonprofit sector in the United States is unique in form and function. This sector includes institutions and individuals situated between government, public and business entities. It is this sector, with more than 1.2 million organizations in the U.S., that mediates, innovates and promotes social causes and services.
Philanthropy (voluntary action for the public good) is a hallmark of the nonprofit sector as individuals give their time, money and know-how to causes about which they care. Students in the nonprofit leadership and management program learn about the nonprofit sector through curriculum instruction and field experience. The required internship component of the program leads students to professional opportunities within the nonprofit sector. Within the undergraduate degree requirements, students may also choose to pursue an American Humanics Certificate and subsequently earn national certification from American Humanics, Inc., which will prepare them to lead and strengthen nonprofit organizations. For more information, access the school's website.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: DTPHX campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: $N$.
Second Language Requirement: $N$.
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Central Arizona College, Maricopa County Community College District.

Career Opportunities: Depending on their interests, graduates seek work in various areas of the nonprofit sector. They find employment in diverse settings that include affiliates of well-known national organizations, such as:

- American Red Cross.
- America's Second Harvest.
- The Humane Society of the United States.
- March of Dimes.
- National Urban League.
- United Way.
- Youth-serving entities such as Big Brothers Big Sisters, Boys and Girls Clubs, Boy Scouts of America, Girl Scouts of the USA, Camp Fire USA and the YMCA of the USA.

Increasing opportunities in the nonprofit sector include careers across the spectrum of community issues such as the arts, environment, health care and others. Typical positions include roles as:

- Development directors.
- Field executives.
- Program directors.
- Volunteer coordinators and similar positions from a variety of agencies and organizations.


## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://scrd.asu.edu

## Parks \& Recreation Management, BS (PPPRMBS)

Campus: DTPHX

Program Description: The B.S. in parks and recreation management provides an interdisciplinary education in the management of parks, protected areas, community-based recreation services, and special event management. The parks and recreation fields emerged from the youth development, and recreation and park movements of the late 19th century. Students learn to integrate the managerial, natural and social sciences to make informed decisions for recreation service delivery.
The curriculum of classroom instruction and field experiences covers:

- Communication.
- History.
- Inclusive services.
- Management.
- Parks and recreation policy.
- Planning.
- Programming.

The required internship component of the program allows students to gain practical experience in the parks and recreation professions. The B.S. in parks and recreation management prepares students for professional positions in a variety of public, private and nonprofit organizations. The National Recreation and Park Association accredits this degree program. There are three areas of emphasis:

- Community recreation services management.
- Natural resource recreation management.
- Special event management.

Students interested in the B.S. in Parks and Recreation Management may also be interested in the school's Therapeutic Recreation program. See the school website for details.

Additional Program Fee: $N$.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: This degree program prepares students for professional positions in a variety of public, private and nonprofit organizations. Graduates are employed in a variety of settings in Arizona, nationally and abroad. Graduates find employment in such diverse settings as:

- City park and recreation departments.
- County and state park agencies.
- Federal natural resource agencies.
- Hospitals.
- Special event management.
- Sport venues.
- Tour operations.
- Youth agencies.

In such settings, graduates design, develop and manage services that address the recreational needs of a particular clientele.

## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://scrd.asu.edu
UCENT 550
scrd@asu.edu
602-496-0550

## Parks \& Recreation Management (Therapeutic Recreation), BS (PPPRMTRBS)

Campus: DTPHX
Program Description: The B.S. in parks and recreation management with a concentration in therapeutic recreation is the only program in Arizona that prepares students for national professional certification in therapeutic recreation. The program is designed for students who have an interest in providing therapeutic interventions and adaptive recreation services for individuals with social problems, illnesses and disabling conditions. The required internship component of the program allows students to gain practical experiences in the therapeutic recreation field. Students who choose this concentration are truly committed to improving people's lives and contributing to their communities.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: DTPHX campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: There are a range of job opportunities for therapeutic recreation professionals ranging from clinical settings such as hospitals and nursing homes to adventure programming for youth-at-risk and people with disabilities.

## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://scrd.asu.edu/portal/
UCENT 550
scrd@asu.edu
602-496-0550

## Public Service \& Public Policy, BS (PPPAFBS) <br> Campus: DTPHX

Program Description: The Bachelor of Science in public service and public policy (PSPP) prepares students for work in government at all levels and nonprofit organizations through comprehensive coverage of topics in public policy, public leadership and management, and urban studies. Students discover the challenges of management and learn how to lead a public organization and understand the process of policy development. This program examines the public sector and address the challenges it faces in a practical way. The PSPP program is unique because it enables you to study public service, policy and administration with a professional focus.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: DTPHX campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: $N$.
Second Language Requirement: $N$.
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: This degree provides you with the knowledge and skills to transform government and policy at all levels. The public service sector offers sustainable, exciting and fulfilling career options. Upon graduation, you will be empowered to use your
knowledge of the public sector as a catalyst to change the world. By understanding the challenges that government faces and being well-versed in the development of multiple, useful and realistic solutions, you will contribute to the development of our local, national and global communities.
A B.S. in public service and public policy prepares students for entry and mid-level supervisory and managerial positions in city, county, state and federal agencies. For those who already have work experience, the degree provides further opportunity for promotion.
The public policy concentration provides students with more specialized skills to allow them to contribute to the policy process. The urban and metropolitan studies concentration provides a broad-based interdisciplinary understanding of urban government with a focus on creating educated citizens who follow a variety of paths to community involvement.
The public leadership concentration provides students an understanding of the leadership and management challenges of organizations and prepares them for supervisory level positions.

## Contact Information:

Public Programs, College of
School of Public Affairs
http://spa.asu.edu/pspp/
UCENT 400
spa@asu.edu
602-496-0450

## Social Work, BSW (PPSWUSWU) <br> Campus: DTPHX, WEST

Program Description: Social work practitioners are committed to the enhancement of individual, family and group problem-solving capacities and the creation of a more nurturing, just and humane social environment. The undergraduate curriculum leads to a Bachelor of Social Work. Juniors and seniors majoring in social work focus on social work courses in social policy and services, human behavior in the social environment, social work practice, research and field instruction in community agencies. In addition, majors take elective courses in related areas.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: DTPHX campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: $N$.
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District, Pima Community College.

Career Opportunities: The B.S.W. practitioner is a generalist focusing on roles such as advocacy, referral, case management and problem-solving functions with individuals, groups, families, organizations and the community.
Employment in social work is expected to increase commensurately with the needs of a growing and diverse population. Social workers are employed in public and private agencies dealing with a wide variety of social issues, including:

- Adoptions.
- Aging.
- AIDS.
- Child abuse.
- Corrections.
- Delinquency.
- Disability.
- Discrimination.
- Domestic violence.
- Family dysfunction.
- Foster care.
- Health.
- Homelessness.
- Mental health.
- Poverty.
- School-related problems.
- Substance abuse.
- Teen pregnancy.

Social work skills such as problem-solving, resource utilization, counseling, group work and community organization are also useful for positions with industry in employee relations and mediation.

## Contact Information:

Public Programs, College of
School of Social Work
http://ssw.asu.edu
UCENT 800
social.work@asu.edu
602-496-0800

## Tourism Development \& Management, BS (PPTDMBS) Campus: DTPHX

Program Description: Through the B.S. in tourism development and management, students acquire the planning and management skills related to the growth and development of tourism throughout the world. The curriculum prepares students for employment across a wide variety of occupations in the rapidly expanding travel and tourism industry, while taking full advantage of its strong connections with the professional tourism community in Phoenix.
The required internship component of the program allows students to gain practical experiences leading to professional positions in various travel, tourism and related fields. Exposure to the businesses of heritage tourism, sustainable tourism, resort management and meeting and convention planning prepare students for successful careers in the travel and tourism industry. While pursuing the B.S. in tourism development and management, a student may also choose to complete a certificate in convention sales and meeting planning. Additionally, students have the opportunity to participate in a study abroad program.

Additional Program Fee: N.
Second Language Requirement: $N$.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: The travel and tourism industry is the largest employer in the world and the second largest in Arizona. Based upon interests, graduates can seek work in the public, nonprofit or private/commercial sectors. Graduates find employment in such diverse settings as resorts, meeting planning, convention and visitor bureaus, tour operations and commercial recreation businesses. In such settings, graduates design, develop and manage services that address the needs of a particular clientele. The metropolitan Phoenix area is a major hub of tourism in the southwestern U.S. and has experienced rapid growth in:

- Business and corporate travel.
- Meetings and conventions.
- Resorts and hotels.
- Sports tourism.
- State and national parks.
- The air transportation sector.
- The gaming and casino sectors.


## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://scrd.asu.edu
UCENT 550
scrd@asu.edu

## Tourism Development \& Management (Resort and Accommodations Leadership), BS (PPTDMRBS) Campus: DTPHX

Program Description: The concentration in resort and accommodations leadership will attract students and professionals who have interests in the diverse areas of knowledge needed within the accommodations sector such as meeting the expectations of hotel and resort guests; the interrelated functions within departments of the lodging and food and beverage industries; ecological, social and economic sustainability practices in the industry; management and leadership specifically for the accommodations sector; and career opportunities. A concentration in resort and accommodations leadership will provide students an academic option to study in-depth the resort and accommodations system/sector and gain knowledge of the importance of the business relationships between suppliers, intermediaries/vendors, guests and the public and private sectors. The concentration will prepare students to serve our community by developing skills, knowledge, techniques and capabilities to address major issues related to resorts and other tourism accommodations.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: There are a variety of job opportunities for resort or hotel professionals ranging from entry level as a management trainee to an assistant manager or manager in various departments such as a front desk manager, room division manager, sales/marketing manager, guest services manager, catering/banquet manager, and convention sales manager.

## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://scrd.asu.edu
UCENT 550
scrd@asu.edu
602-496-0550

## Tourism Development and Management (Sustainable Tourism), BS (PPTDMSBS) Campus: DTPHX

Program Description: The tourism development and management major, within the School of Community Resources and Development, provides students with the theoretical understanding necessary to maneuver the complexities of one of the world's largest industries. A concentration in sustainable tourism will allow majors to hone their understanding of the key concepts of sustainability and how they can be applied to tourism destinations and development. Students will learn the dominant theories and language that make up sustainability science and the skills necessary to measure, create and implement sustainability policies in tourism destinations from the planning to the management stage of development. Students will take courses offered by the School of Sustainability in addition to courses in the School of Community Resources and Development, guaranteeing that they have a strong foundation in the basic theories of the growing discipline of sustainability while applying these newfound skills to tourism development and management.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Career Opportunities: The area of sustainable tourism is becoming increasingly important. Many tourism
businesses are hiring sustainability coordinators, including hotels, airlines, convention and visitor bureaus, and large attractions. Tour companies, such as those that implement ecotourism and volunteer tourism experiences, are especially interested in employees with a
strong sustainable tourism background. Numerous sustainable tourism nonprofit organizations have emerged in recent years, and many government related tourism organizations also hire those with a strong sustainability focus. As well, consulting opportunities are available to assist tourism businesses with development of sustainable practices.

## Contact Information:

Public Programs, College of
School of Community Resources and Development
http://scrd.asu.edu
UCENT 550
scrd@asu.edu
602-496-1056

## Urban \& Metropolitan Studies, BA (PPURBBA)

Campus: DTPHX

Program Description: Located in the heart of downtown Phoenix, the urban and metropolitan studies program is for students who have a yearning to study and understand urban theory in order to effectively address the challenges of rapid growth, along with other contemporary urban issues.
Our students discover what makes the city tick - and the city is their classroom. They examine challenges and solutions by researching history, society, culture, economy and politics in order to understand urban theory. They use that knowledge to get involved in their communities; giving them an outlet through which they can experience practical ways of solving complex problems faced by metropolitan regions. Our students are invested in their neighborhoods. Many of them live and work downtown. In the urban and metropolitan studies program, they learn how to improve urban health and well-being, often training themselves to be the future leaders of our urban environments. Our students don't stop there; others focus on making a wide variety of other contributions to society, studying the role of arts and culture, business and property development, revitalization and community building in the life of the region.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: DTPHX campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: Y .
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: The urban and metropolitan studies program prepares students for work in a wide range of fields. The interdisciplinary approach of the program allows graduates to successfully enter fields as diverse as:

- Architecture and finance.
- City management and policy.
- City planning and law.
- Nonprofit management.
- Real estate development.

Graduates from this program work in public, private and not-for-profit fields dedicated to improving urban life. Many graduates also pursue advanced degrees in:

- Arts administration.
- Business.
- Education.
- Historic preservation.Law.
- Journalism.
- Public policy.
- Public administration.
- Real estate development.
- Urban planning and other fields.


## Contact Information:

Public Programs, College of
School of Public Affairs
http://spa.asu.edu/new/urban/default.htm

## Urban \& Metropolitan Studies, BS (PPURBBS)

Campus: DTPHX

Program Description: Located in the heart of downtown Phoenix, the urban and metropolitan studies program is for students who have a yearning to study and understand urban theory in order to effectively address the challenges of rapid growth, along with other contemporary urban issues.
Our students discover what makes the city tick - and the city is their classroom. They examine challenges and solutions by researching history, society, culture, economy and politics in order to understand urban theory. They use that knowledge to get involved in their communities; giving them an outlet through which they can experience practical ways of solving complex problems faced by metropolitan regions. Our students are invested in their neighborhoods. Many of them live and work downtown. In the urban and metropolitan studies program, they learn how to improve urban health and well-being, often training themselves to be the future leaders of our urban environments. Our students don't stop there; others focus on making a wide variety of other contributions to society, studying the role of arts and culture, business and property development, revitalization and community building in the life of the region.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: DTPHX campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Career Opportunities: The urban and metropolitan studies program prepares students for work in a wide range of fields. The interdisciplinary approach of the program allows graduates to successfully enter fields as diverse as:

- Architecture and finance.
- City management and policy.
- City planning and law.
- Nonprofit management.
- Real estate development.

Graduates from this program work in public, private and not-for-profit fields dedicated to improving urban life. Many graduates also pursue advanced degrees in:

- Arts administration.
- Business.
- Education.
- Historic preservation.
- Journalism.
- Law.
- Public policy.
- Public administration.
- Real estate development.
- Urban planning and other fields.


## Contact Information:

Public Programs, College of
School of Public Affairs
http://spa.asu.edu/new/urban/default.htm
UCENT 400
spa@asu.edu
602-496-0450

Sustainability, School of

## Sustainability, BA (SUSUSTBA)

## Campus: TEMPE

Program Description: The B.A. in sustainability introduces students to the concept of sustainability in the context of real-world problems, exploring the interaction of environmental, economic and social systems. Although the program is transdisciplinary, the B.A. in sustainability is best suited to those inclined toward social sciences, planning or related fields.

Students pursuing a B.A. in sustainability can pursue the following tracks:

- International development and sustainability.
- Policy and governance in sustainable systems.
- Society and sustainability.
- Sustainable urban dynamics.

Students will gain a general understanding of sustainability issues at the local, regional and global level. They will be adaptable, capable of both communicating and learning across a number of disciplines, and have a strong orientation toward problem solving.

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Additional Program Fee: N.
Second Language Requirement: Y .
First Required Math Course: MAT 117 College Algebra.
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Admission Requirements: The School of Sustainability has higher admission requirements. Applicants must select a second choice for their major on the application. Students who are not admitted to the School of Sustainability and who did not select a second major or are not admissible to the second major choice will be admitted to the exploratory social and behavioral sciences program within University College. Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Freshman applicants must meet the following standards:

- Have a minimum high school ABOR GPA of 3.30; AND
- A high school class rank in the top 15 percent of class; OR
- An SAT combined score of 1140 or higher; OR
- An ACT combined score of 25 or higher.
- No high school math competency deficiency.

Transfer students (with 12 or more transfer hours after high school graduation) are required to have a cumulative transfer GPA of 3.30 or higher.

ASU students who would like to change their major to sustainability are required to have a cumulative ASU GPA of 3.30 or higher (based on at least 12 credit hours).

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: School of Sustainability graduates are prepared for admission into strong graduate and professional schools. They may also assume positions in industry, consultancy, utilities, regulatory agencies, nonprofits, governmental agencies and nongovernmental organizations. Recent interest in sustainability within business and government has created new employment opportunities (e.g. sustainability coordinators, directors and managers). By engaging a breadth of knowledge and experience, and by acquiring the skills to integrate various domains of knowledge, sustainability students prepare themselves for a variety of careers to help find solutions to sustainability challenges.

## Contact Information:

Sustainability, School of
School of Sustainability
http://schoolofsustainability.asu.edu
GIOS 108
schoolofsustainability@asu.edu

## Sustainability, BS (SUSUSTBS)

Campus: TEMPE
Program Description: The B.S. in sustainability introduces students to the concept of sustainability in the context of real-world problems, exploring the interaction of environmental, economic and social systems. Although the program is transdisciplinary, the B.S. in sustainability is best suited to those inclined toward natural sciences, economics or engineering.

Students pursuing a B.S. in sustainability can pursue the following tracks:

- Economics of sustainability.
- Sustainable ecosystems.
- Sustainable energy, materials and technology.

Students will gain a general understanding of sustainability issues at the local, regional and global level. They will be adaptable, capable of both communicating and learning across a number of disciplines, and have a strong orientation toward problem solving.

## Additional Program Fee: N.

## Second Language Requirement: Y .

Minimum math requirement depends on track student selects. MAT 210: Brief Calculus (MA) or
MAT 251: Calculus for Life Sciences (MA) or
MAT 265: Calculus for Engineers (MA) or
MAT 270: Calculus with Analytical Geometry I (MA)

Admission Requirements: The School of Sustainability has higher admission requirements. Applicants must select a second choice for their major on the application. Students who are not admitted to the School of Sustainability and who did not select a second major or are not admissible to the second major choice will be admitted to the exploratory social and behavioral sciences program within University College. Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Freshman applicants must meet the following standards:

- Have a minimum high school ABOR GPA of 3.30; AND
- A high school class rank in the top 15 percent of class; OR
- An SAT combined score of 1140 or higher; OR
- An ACT combined score of 25 or higher.
- No high school math competency deficiency.

Transfer students (with 12 or more transfer hours after high school graduation) are required to have a cumulative transfer GPA of 3.30 or higher.

ASU students who would like to change their major to sustainability are required to have a cumulative ASU GPA of 3.30 or higher (based on at least 12 credit hours).

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: School of Sustainability graduates are prepared for admission into strong graduate and professional schools. They may also assume positions in industry, consultancy, utilities, regulatory agencies, nonprofits, governmental agencies and nongovernmental organizations. Recent interest in sustainability within business and government has created new employment opportunities (e.g., sustainability coordinators, directors and managers). By engaging a breadth of knowledge and experience, and by acquiring the skills to integrate various domains of knowledge, sustainability students prepare themselves for a variety of careers to help find solutions to sustainability challenges.

## Contact Information:

Sustainability, School of
School of Sustainability
http://schoolofsustainability.asu.edu
GIOS 108
schoolofsustainability@asu.edu
480-727-6963
Teachers College, Mary Lou Fulton

## Early Childhood Education, BAE (EDECDBAE) <br> Campus: DTPHX, POLY, TEMPE, WEST

Program Description: The B.A.E. in early childhood education program in the Mary Lou Fulton Teachers College is available at all campuses. This program offers students a firm grounding in early childhood teaching and programming with special emphasis on community connectedness, technology integration, administration, policy analysis and advocacy related to young children and their families.
The program and faculty members have earned several national awards on integrating technology into teaching. Every semester students engage in field experiences and internships that align with their academic program. Graduates are recommended for the new Arizona birth-to-grade-three teacher certification and a provisional endorsement to work with English language learners. All graduates desiring to teach in a public school preschool and kindergarten, or the primary grades will have to pass the state certification test in both content area knowledge and professional knowledge.

Additional Program Fee: N.
Second Language Requirement: $N$.
First Required Math Course: MAT 142 College Mathematics.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Changes in Arizona state certification will require all individuals teaching in public schools, early childhood programs and serving children birth through kindergarten to meet new early childhood certification or endorsement requirements by 2012. According to a policy study on the condition of early childhood education in 2005, the demand for early childhood teachers in Arizona is much greater than the current supply. Thus, job opportunities in center-based programs and public school early childhood programs are numerous. Many graduates with a degree in early childhood teaching and leadership hold leadership positions in Head Start, private nonprofit and private for-profit, center-based programs and public school early childhood centers. More than 98 percent of graduates accept employment offers within the first year of completing this program.

## Contact Information:

Teachers College, Mary Lou Fulton
Division of Teacher Preparation
http://education.asu.edu/
FAB S210-1
educationadvising@asu.edu
602-543-6358

## Elementary Education, BAE (TEEEDBAE)

Campus: DTPHX, POLY, TEMPE, WEST
Program Description: The B.A.E. in elementary education program in the Mary Lou Fulton Teachers College is available on all campuses. This program offers students a firm grounding in academic content with current research and best practices, accompanied by real-world classroom experiences. Students engage in field experiences and internships that align with their elementary education academic program. The faculty members in the program are experienced in working successfully with firstgeneration college students.
All students graduate from the program with extensive experience in integrating technology into teaching and a provisional endorsement to work with English language learners. Students who complete the B.A.E. in elementary education are recommended for grades one-eight teacher certification. All graduates of this program will have to pass a state certification test in content area knowledge and professional knowledge.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Arizona Western College, Central Arizona College, Cochise College, Coconino Community College, Eastern Arizona College, Maricopa County Community College District, Mohave Community College, Pima Community College, Yavapai College.

Career Opportunities: According to recent research on teacher supply and demand, the demand for well-prepared elementary education teachers is strong. Job opportunities in a fast growing state such as Arizona are numerous. Demand for elementary teachers will continue to be strong. Many graduates with a degree in elementary education work in public elementary schools, charter schools and in private school settings. More than 98 percent of graduates accept employment offers within the first year of completing this program.

## Contact Information:

Teachers College, Mary Lou Fulton
Division of Teacher Preparation
http://education.asu.edu/
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educationadvising@asu.edu
602-543-6358

## Elementary Education (Diversity in Language and Learning), BAE (TEDLLBAE) <br> Campus: DTPHX, POLY, TEMPE, WEST

Program Description: The B.A.E. in elementary education, diversity in language and learning with an English as a second language endorsement, program in the Mary Lou Fulton Teachers College is offered at the Tempe campus and through the Downtown campus. This program is designed to give students a firm grounding in academic content with current research and best practices, accompanied by real-world classroom experiences. Students are engaged in field experiences and internships that align with their English as a second language program. This program requires six credit hours of a foreign language or its equivalent and will enable the student to work with second-language learners.
Students who complete the B.A.E. in elementary education, diversity in languages and literature with an English as a second language endorsement are recommended for grades one-eight teacher certification. All graduates of this program will have to pass the state certification test in content area knowledge and professional knowledge.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Career Opportunities: According to recent studies on teacher supply and demand, the demand for well-prepared elementary education teachers is strong. Job opportunities in a fast growing state such as Arizona are numerous. Students seeking endorsements in bilingual and English as a second language will find that demand is great in these areas. Many graduates with a degree in elementary education work in public elementary schools, charter schools and in private school settings. More than 98 percent of graduates receive employment offers within the first year of completing this program.

## Contact Information:

Teachers College, Mary Lou Fulton
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educationadvising@asu.edu
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## Secondary Education (Biological Sciences), BAE (TEBIOBAE)

Campus: DTPHX, POLY, TEMPE, WEST

Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching
knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the Mary Lou Fulton Teachers College maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field. Secondary education in biological sciences is offered in its entirety on ASU's Tempe, West and Polytechnic campuses. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown Phoenix, Polytechnic, Tempe and West) as well as general studies courses that are part of this curriculum. All graduates of this program will have to pass state certification tests in content area knowledge and professional knowledge. Please consult with an Academic Success Specialist for additional information.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.
Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space science.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physical education.
- Physics.
- Political Science.
- Spanish.

Graduates specializing in art, dance, music and physical education receive a secondary teaching certificate with a K-12 endorsement.

## Contact Information:

Teachers College, Mary Lou Fulton
Division of Teacher Preparation
http://education.asu.edu/
FAB S210-1
educationadvising@asu.edu
602-543-6358

## Secondary Education (Business), BAE (EDBUSBAE)

Campus: DTPHX, POLY, TEMPE, WEST
Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the Mary Lou Fulton Teachers College maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field. Secondary education in business is offered primarily on ASU's Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown Phoenix, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. A limited portion of specialization courses are also offered at the Downtown
and West campus. All graduates of this program will have to pass state certification tests in content area knowledge and professional knowledge. Please consult with an Academic Success Specialist for additional information.

Additional Program Fee: N.
Second Language Requirement: N .
First Required Math Course: MAT 210 Brief Calculus.
Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space science.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physical education.
- Physics.
- Political Science.
- Spanish.

Graduates specializing in art, dance, music and physical education receive a secondary teaching certificate with a K-12 endorsement.

## Contact Information:

Teachers College, Mary Lou Fulton
Division of Teacher Preparation
http://teach.asu.edu/programs/undergraduate
FAB S210-1
educationadvising@asu.edu
602-543-6358

## Secondary Education (Chemistry), BAE (TECHMBAE)

Campus: DTPHX, POLY, TEMPE, WEST
Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the Mary Lou Fulton Teachers College maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field. Secondary education in chemistry is offered in its entirety on ASU's Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. All graduates of this program will have to pass state certification tests in content area knowledge and professional knowledge. Please consult with an Academic Success Specialist for additional information.

Additional Program Fee: $N$.
Second Language Requirement: $N$.
First Required Math Course: MAT 270 Calculus w/Analytic Geometry I.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space science.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physical education.
- Physics.
- Political Science.
- Spanish.

Graduates specializing in art, dance, music and physical education receive a secondary teaching certificate with a K-12 endorsement.

## Contact Information:

Teachers College, Mary Lou Fulton
Division of Teacher Preparation
http://education.asu.edu/
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## Secondary Education (Earth \& Space Sciences), BAE (EDESSBAE)

Campus: DTPHX, POLY, TEMPE, WEST
Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the Mary Lou Fulton Teachers College maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field. Secondary education in earth and space sciences is offered in its entirety on ASU's Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown Phoenix, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. All graduates of this program will have to pass a state certification test in professional knowledge. Please consult with an Academic Success Specialist for additional information.

Additional Program Fee: N.
Second Language Requirement: N .
MAT 210 Brief Calculus or
MAT 270 Calculus with Analytic Geometry
Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space science.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physical education.
- Physics.
- Political Science.
- Spanish.

Graduates specializing in art, dance, music and physical education receive a secondary teaching certificate with a K-12 endorsement.

## Contact Information:

Teachers College, Mary Lou Fulton
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## Secondary Education (Economics), BAE (EDECNBAE)

Campus: DTPHX, POLY, TEMPE, WEST
Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the Mary Lou Fulton Teachers College maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field. Secondary education in economics is offered primarily on ASU's Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown Phoenix, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. A limited portion of specialization courses are also offered at the Downtown and West campus. All graduates of this program will have to pass state certification tests in content area knowledge and professional knowledge. Please consult with an Academic Success Specialist for additional information.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.

Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space science.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physical education.
- Physics.
- Political Science.
- Spanish.

Graduates specializing in art, dance, music and physical education receive a secondary teaching certificate with a K-12 endorsement.

## Contact Information:

Teachers College, Mary Lou Fulton
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educationadvising@asu.edu
602-543-6358

## Secondary Education (English), BAE (TEENGBAE)

Campus: DTPHX, POLY, TEMPE, WEST
Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the Mary Lou Fulton Teachers College maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field. Secondary education in English is offered in its entirety on the Tempe, West and Polytechnic campuses. A portion of specialization courses are also available at the Downtown Campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown Phoenix, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. All graduates of this program will have to pass state certification tests in content area knowledge and professional knowledge. Please consult with an Academic Success Specialist for additional information.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space science.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physical education.
- Physics.
- Political Science.
- Spanish.

Graduates specializing in art, dance, music and physical education receive a secondary teaching certificate with a K-12 endorsement.

## Contact Information:

Teachers College, Mary Lou Fulton
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http://education.asu.edu/
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## Secondary Education (French), BAE (EDFREBAE)

Campus: DTPHX, POLY, TEMPE, WEST
Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the Mary Lou Fulton Teachers College maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field. Secondary education in French is offered in its entirety on ASU's Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown Phoenix, Polytechnic, Tempe and West), as well as general studies courses that may be available that are part of this curriculum. A limited portion of specialization courses are also offered at the Downtown campus. All graduates of this program will have to pass state certification tests in content area knowledge and professional knowledge. Please consult with an Academic Success Specialist for additional information.

## Additional Program Fee: N.

Second Language Requirement: $N$.
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space science.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physical education.
- Physics.
- Political Science.
- Spanish.

Graduates specializing in art, dance, music and physical education receive a secondary teaching certificate with a K-12 endorsement.

## Contact Information:

Teachers College, Mary Lou Fulton
Division of Teacher Preparation
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educationadvising@asu.edu
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## Secondary Education (Geography), BAE (EDGCUBAE)

Campus: DTPHX, POLY, TEMPE, WEST

Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the Mary Lou Fulton Teachers College maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field.
Secondary education in geography is offered in it's entirely on ASU's Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown Phoenix, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. All graduates of this program will have to pass state certification tests in content area knowledge and professional knowledge. Please consult with an Academic Success Specialist for additional information.

Additional Program Fee: N.
Second Language Requirement: $N$.
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space science.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physical education.
- Physics.
- Political Science.
- Spanish.

Graduates specializing in art, dance, music and physical education receive a secondary teaching certificate with a K-12 endorsement.

## Contact Information:

Teachers College, Mary Lou Fulton
Division of Teacher Preparation
http://education.asu.edu/
FAB S210-1
educationadvising@asu.edu
602-543-6358

## Secondary Education (German), BAE (EDGERBAE)

Campus: DTPHX, POLY, TEMPE, WEST
Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the Mary Lou Fulton Teachers College maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field. Secondary education in German is offered in its entirety on ASU's Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown Phoenix, Polytechnic, Tempe and West), as well as general studies courses that may be available that are part of this curriculum. A limited portion of specialization courses are also offered at the Downtown campus. All graduates of this program will have to pass state certification tests in content area knowledge and professional knowledge. Please consult with an Academic Success Specialist for additional information.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space science.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physical education.
- Physics.
- Political Science.
- Spanish.

Graduates specializing in art, dance, music and physical education receive a secondary teaching certificate with a K-12 endorsement.

## Contact Information:

Teachers College, Mary Lou Fulton
Division of Teacher Preparation
http://education.asu.edu/
FAB S210-1

## Secondary Education (History), BAE (TEHISBAE)

Campus: DTPHX, POLY, TEMPE, WEST
Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the Mary Lou Fulton Teachers College maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field. Secondary education in history is offered in its entirety on ASU's Tempe, West and Polytechnic campuses. A portion of specialization courses are also available at the Downtown Phoenix campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown Phoenix, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. All graduates of this program will have to pass state certification tests in content area knowledge and professional knowledge. Please consult with an Academic Success Specialist for additional information.

## Additional Program Fee: N.

## Second Language Requirement: N.

First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space science.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physical education.
- Physics.
- Political Science.
- Spanish.

Graduates specializing in art, dance, music and physical education receive a secondary teaching certificate with a K-12 endorsement.

## Contact Information:

Teachers College, Mary Lou Fulton
Division of Teacher Preparation
http://education.asu.edu/
FAB S210-1
educationadvising@asu.edu
602-543-6358

## Secondary Education (Japanese), BAE (EDJPNBAE)

Campus: DTPHX, POLY, TEMPE, WEST

Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the Mary Lou Fulton Teachers College maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field. Secondary education in Japanese is offered in its entirety on ASU's Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown Phoenix, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. All graduates of this program will have to pass a state certification test in professional knowledge. Please consult with an Academic Success Specialist for additional information.

## Additional Program Fee: N.

## Second Language Requirement: N.

First Required Math Course: MAT 142 College Mathematics.

Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space science.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physical education.
- Physics.
- Political Science.
- Spanish.

Graduates specializing in art, dance, music and physical education receive a secondary teaching certificate with a K-12 endorsement.

## Contact Information:

Teachers College, Mary Lou Fulton
Division of Teacher Preparation
http://education.asu.edu/
FAB S210-1
educationadvising@asu.edu
602-543-6358

## Secondary Education (Mathematics), BAE (TEMATBAE)

Campus: DTPHX, POLY, TEMPE, WEST

Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with
the secondary education requirement for an academic specialization, the Mary Lou Fulton Teachers College maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field. Secondary education in mathematics is offered in its entirety on ASU's Tempe and West campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown Phoenix, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. All graduates of this program will have to pass state certification tests in content area knowledge and professional knowledge. Please consult with an Academic Success Specialist for additional information.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 270 Calculus w/Analytic Geometry I.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space science.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physical education.
- Physics.
- Political Science.
- Spanish.

Graduates specializing in art, dance, music and physical education receive a secondary teaching certificate with a K-12 endorsement.

## Contact Information:

Teachers College, Mary Lou Fulton
Division of Teacher Preparation
http://education.asu.edu/
FAB S210-1
educationadvising@asu.edu
602-543-6358

## Secondary Education (Physical Education), BAE (ECPPEBAE)

Campus: POLY
Program Description: The physical education concentration under the B.A.E. in secondary education prepares future teachers to delivery quality $\mathrm{K}-12$ physical education programs. This program is unique in its practice-oriented focus on intensive field experiences, practical application of current knowledge, a field-tested and widely used curriculum and classroom management model, and an emphasis on current technology. The curriculum directly aligns with Arizona's standards for teachers and the National Association for Sport and Physical Education's beginning teacher standards.

During the first two years of the program, students explore education as a career field and gain experience in local community schools and agencies. During the final two years, students complete content specific teaching methodology courses and intensive field experiences at both the elementary and secondary levels. Course instructors use their experience teaching in a variety of K-12 settings and coaching environments to augment class experiences with many practical applications.
Secondary education in physical education is offered in its entirety on ASU's Polytechnic campus. All graduates of this program will have to pass state certification tests in content area knowledge and professional knowledge. Please consult with an Academic Success Specialist for additional information on this major.

Additional Program Fee: N.
Second Language Requirement: $N$.
First Required Math Course: MAT 142 College Mathematics.
Admission Requirements: Students will be admitted to the preprofessional status and must complete additional requirements for entrance to the professional status. See department web site for more information.

Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space science.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physical education.
- Physics.
- Political Science.
- Spanish.

Graduates specializing in art, dance, music and physical education receive a secondary teaching certificate with a K-12 endorsement.

## Contact Information:

Teachers College, Mary Lou Fulton
Division of Teacher Preparation
http://education.asu.edu/
SANCA 331
educationadvising@asu.edu
480-727-1103

## Secondary Education (Physics), BAE (EDPHYBAE)

Campus: DTPHX, POLY, TEMPE, WEST
Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the Mary Lou Fulton Teachers College maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field.

Secondary education in physics is offered entirely on ASU's Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown Phoenix, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. All graduates of this program will have to pass state certification tests in content area knowledge and professional knowledge. Please consult with an Academic Success Specialist for additional information.

Additional Program Fee: N.
Second Language Requirement: $N$.
First Required Math Course: MAT 270 Calculus w/Analytic Geometry I.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space science.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physical education.
- Physics.
- Political Science.
- Spanish.

Graduates specializing in art, dance, music and physical education receive a secondary teaching certificate with a K-12 endorsement.

## Contact Information:

Teachers College, Mary Lou Fulton
Division of Teacher Preparation
http://education.asu.edu/
FAB S210-1
educationadvising@asu.edu
602-543-6358

## Secondary Education (Political Science), BAE (TEPOLBAE)

Campus: DTPHX, POLY, TEMPE, WEST
Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the Mary Lou Fulton Teachers College maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field. All graduates of this program will have to pass state certification tests in content area knowledge and professional knowledge. Please consult with an Academic Success Specialist for additional information.

Additional Program Fee: $N$.
Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space science.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physical education.
- Physics.
- Political Science.
- Spanish.

Graduates specializing in art, dance, music and physical education receive a secondary teaching certificate with a K-12 endorsement.

## Contact Information:

Teachers College, Mary Lou Fulton
Division of Teacher Preparation
http://education.asu.edu/
FAB S210-1
educationadvising@asu.edu
602-543-6358

## Secondary Education (Spanish), BAE (TESPABAE)

## Campus: DTPHX, POLY, TEMPE, WEST

Program Description: The Department of Secondary Education in the Mary Lou Fulton Teachers College offers a three-semester professional program leading to a B.A.E. in secondary education. In addition, students may complete one of seven secondary specializations at the West or Downtown Phoenix campuses:

- Biological sciences.
- English.
- History.
- Mathematics.
- Natural sciences.
- Social studies.
- Spanish.

While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. Students who successfully complete the required course work and student
teaching are recommended for Arizona secondary education certification, grades seven to 12. All graduates of this program will have to pass state certification tests in content area knowledge and professional knowledge. Please consult with an Academic Success Specialist for additional information.

Additional Program Fee: N.
Second Language Requirement: N .
First Required Math Course: MAT 142 College Mathematics.
Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space science.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physical education.
- Physics.
- Political Science.
- Spanish.

Graduates specializing in art, dance, music and physical education receive a secondary teaching certificate with a K-12 endorsement.

## Contact Information:

Teachers College, Mary Lou Fulton
Division of Teacher Preparation
http://education.asu.edu/
FAB S210-1
educationadvising@asu.edu
602-543-6358

## Special Education, BAE (TESPEBAE)

Campus: DTPHX, POLY, TEMPE, WEST
Program Description: The B.A.E. in special education in the Mary Lou Fulton Teachers College is available at all campuses. Special education for children and adolescents with diverse learning needs is viewed as a service not a place. Our primary goals are to prepare teachers to provide a variety of educational options based on individual needs and to design curriculum based on the whole child in the context of their family, culture, community and learning needs.
Because the general education classroom is a viable placement option for many students with mild and moderate learning and behavior disabilities, teaching special education teachers to collaborate is emphasized throughout the professional preparation sequence. Students receive additional training in using interpersonal communication and problem-solving skills. They also learn adaptive techniques and about assistive technologies that facilitate the successful integration of students with diverse leaning needs in general education classrooms.
This is a dual-certificate program which leads to certification in both special education in mild cross-categorical disabilities and first through eighth grade elementary education. All graduates of this program will have to pass state certification tests in content area knowledge and professional knowledge. Please consult with an Academic Success Specialist for additional information.

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 142 College Mathematics.

Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: National and state studies report the current and projected need for the next five to 10 years will be foremost for special education teachers. Graduates of the B.A.E. in special education program will be eligible to teach kindergarten through grade 12 for the spectrum of mild disabilities (learning disabilities, behavior disabilities and mild mental retardation) in crosscategorical special education classes. In general education classes, graduates serve in resource rooms and self-contained classes as itinerant teachers, consulting teachers and co-teachers. Graduates also have the opportunity to consult with governmental agencies, curriculum publishers and parent organizations.

## Contact Information:

Teachers College, Mary Lou Fulton
Division of Teacher Preparation
http://education.asu.edu/
FAB S210-1
educationadvising@asu.edu
602-543-6358
Technology and Innovation, College of

## Aeronautical Management Technology (Air Transportation Management), BS (TSAMTMBS)

Campus: POLY

Program Description: The air transportation management concentration, under the B.S. in aeronautical management technology, prepares students for air carrier or airport management. The student gains a strong technical background in aircraft structures, reciprocating and turbine engines, aircraft performance and design, management skills, business principles, systems analysis and a variety of course work specific to aircraft flight, airport operations and air transportation systems.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.

Career Opportunities: A degree in air transportation management prepares graduates for careers as:

- Air carrier manager.
- Air traffic control specialist.
- Airport manager.
- General aviation operations manager.

To facilitate career options, the student selects a focus area in either air carrier management or airport management.

## Contact Information:

Technology and Innovation, College of
Dept of Tech Entrepreneurship and Innovation Mgmt
http://technology.asu.edu/aviation
SIM
technology@asu.edu
480-727-1021

## Aeronautical Management Technology (Professional Flight), BS (TSAMTFBS)

## Campus: POLY

Program Description: The professional flight concentration, under the B.S. in aeronautical management technology, is for students who are seriously interested in becoming professional airline pilots. Graduates are prepared to assume responsibilities in a wide variety of technically related areas within professional aviation flight operations. The concentration features flight instruction as a curriculum requirement and an airline bridge training program with Mesa Airlines.
The Aviation Accreditation Board International accredits this program and the Federal Aviation Administration (FAA) certifies flight instruction.

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.

Admission Requirements: This major has additional admission requirements including Federal Aviation Administration requirements. Students will be admitted to the pre-professional status and then complete additional requirements for admission to the professional program. See http://technology.asu.edu/aviation for more information.

Career Opportunities: The professional flight concentration offers students private pilot, commercial pilot and flight instructor certificates, as well as instrument pilot, instrument instructor and multiengine pilot ratings. With these flight qualifications and the technically based bachelor's degree, the graduate has a wide variety of career opportunities, including flight crew service on commercial and business aircraft.

## Contact Information:

Technology and Innovation, College of
Dept of Tech Entrepreneurship and Innovation Mgmt
http://technology.asu.edu/aviation
SIM
technology@asu.edu
480-727-1021

## Agribusiness (Agribusiness Science), BS (AGAGBPBS)

## Campus: POLY

Program Description: The B.S. in agribusiness, with a concentration in agribusiness science, is a unique program offering students an opportunity to prepare for a variety of science-based careers in the broad agribusiness sector of the economy. Building upon a foundation of course work in chemistry and biology, students complete a curriculum leading to careers and opportunities for further study. Some students may apply to colleges of veterinary medicine. Others may seek to apply their science knowledge in the human or veterinary pharmaceutical industry or in the food industry focusing on processing, production and food safety.

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.

Career Opportunities: Doctors of veterinary medicine enjoy a vast spectrum of career opportunities, including private practice, biotechnology research, and positions in federal and state governmental agencies. Food science professionals create, improve and provide for the safety of food products through their work in the food processing industry, universities or the federal government.

## Contact Information:

Technology and Innovation, College of
Morrison School of Agribusiness and Resource Mgmt
http://morrison.asu.edu/
PRLTA 330
morrisonschool@asu.edu
480-727-1585

Program Description: The B.S. in agribusiness with a concentration in global agribusiness is an applied, industry-oriented curriculum. The study of the food and fiber system in the U.S. and around the world is the foundation of this program. This concentration is specifically designed to meet the needs of the students interested in focusing their studies on the business aspects of agriculture in the domestic and global economy. Students learn to analyze firms involved in input and output supply activities, commodity trading, food manufacturing and food distribution.

Additional Program Fee: Y.
Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.

Career Opportunities: Agribusiness is a dynamic industry providing employment to about 23 percent of the U.S. labor force. Opportunities exist in management, marketing, finance and technical positions with private agribusiness firms and governmental agencies.

## Contact Information:

Technology and Innovation, College of
Morrison School of Agribusiness and Resource Mgmt
http://morrison.asu.edu/
PRLTA 330
morrisonschool@asu.edu
480-727-1585

## Air Traffic Management, BS (TSATMBS)

Campus: POLY
Program Description: The B.S. in air traffic management provides a technical foundation in air traffic control procedures and operations for students interested in becoming air traffic controllers who ensure safe, orderly and expeditious flow of aircraft traffic both on the ground and in the air. Students gain a strong background in aircraft operations, management skills and business principles through course work specific to air traffic control.

## Additional Program Fee: Y.

Second Language Requirement: $N$.
First Required Math Course: MAT 265 Calculus for Engineers I.

Admission Requirements: This major has additional admission requirements including Federal Aviation Administration requirements. Students who do not have US citizenship status cannot be admitted to the program. Students will be admitted to the pre-professional status and then complete additional requirements for admission to the professional program. See www.poly.asu.edu/aviation for more information.

Career Opportunities: It is estimated that the Federal Aviation Administration (FAA) will hire approximately 15,000 air traffic controllers in the next 10 years. Increases in the volume of air traffic will require more controllers to handle the additional work. New computerized systems will assist controllers by automatically making many of the routine decisions. This will allow controllers to handle more traffic, thus increasing their productivity. Despite the obvious demand for new controllers in the immediate future, competition to get into the FAA-approved training programs is expected to remain intense, as there generally are many more applicants than there are openings. Graduates from this program have an excellent opportunity of being hired as air traffic controllers.

## Contact Information:

Technology and Innovation, College of
Dept of Tech Entrepreneurship and Innovation Mgmt
http://technology.asu.edu/aviation
SIM
technology@asu.edu
480-727-1021

Program Description: The applied biological sciences concentration, under the B.S. in applied biological sciences, focuses on the application of biological principles to challenges in the life sciences. This concentration is designed for students interested in the life sciences, and the interaction of these sciences with the ecosystem and human society within the ecosystem. Mastery of fundamental biological principles is emphasized through classroom learning and hands-on activities in laboratories. Students also work in the living laboratories of the Sonoran desert, the surrounding ecosystems and the landscape of the greater Phoenix area.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Graduates can pursue entry-level careers in wildlife and restoration ecology, urban horticulture and secondary education. The general program in applied biological sciences prepares graduates to succeed in graduate and professional schools in disciplines such as:

- Animal health.
- Dentistry.
- Ecology.
- Environmental biotechnology.
- Horticulture.
- Medicine.
- Physical therapy.
- Veterinary medicine.
- Wildlife biology.


## Contact Information:

Technology and Innovation, College of
Department of Applied Sciences and Mathematics
http://technology.asu.edu/dasm
SANTN 330
technology@asu.edu
480-727-1874

## Applied Biological Sciences (Secondary Education in Biology), BS (TSABSSBS)

Campus: POLY
Program Description: The secondary education in biology concentration of the B.S. in applied biological sciences qualifies students for state of Arizona certification in secondary biology education. Students in this program will have advisors in both the College of Technology and Innovation and the Mary Lou Fulton Teachers College.

Additional Program Fee: $N$.
Second Language Requirement: $N$.
First Required Math Course: MAT 210 Brief Calculus.
Career Opportunities: Graduates can pursue numerous entry-level careers in biology. Specific career fields include secondary education, wildlife and restoration ecology and urban horticulture. Employment opportunities exist in both private and public sectors. The general program in applied biological sciences also prepares graduates to succeed in graduate or professional schools in disciplines such as:

- Animal health.
- Dentistry.
- Ecology.
- Environmental biotechnology.
- Horticulture.
- Medicine.
- Physical therapy.
- Wildlife biology.


## Contact Information:

Technology and Innovation, College of
Department of Applied Sciences and Mathematics
http://technology.asu.edu/dasm
SANTN 330
technology@asu.edu
480-727-1874

## Applied Biological Sciences (Urban Horticulture), BS (TSABSUBS)

Campus: POLY

Program Description: The urban horticulture concentration, under the B.S. in applied biological sciences degree, emphasizes the relationship of plants and people in urban and suburban environments, with major emphasis given to the sustainability of these environments. Set in a unique southwestern desert location, the program teaches students how to practice urban horticulture principles and develop skills that help to create aesthetically pleasing urban environments. This approach is coupled with an appreciation of environmental conservation and stewardship.

Additional Program Fee: $N$.
Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.
Career Opportunities: Graduates can pursue numerous entry-level careers in biology. Specific career fields include secondary education, wildlife and restoration ecology and urban horticulture. Employment opportunities exist in both private and public sectors. The general program in applied biological sciences also prepares graduates to succeed in graduate or professional schools in disciplines such as:

- Animal health.
- Dentistry.
- Ecology.
- Environmental biotechnology.
- Horticulture.
- Medicine.
- Physical therapy.
- Wildlife biology.


## Contact Information:

Technology and Innovation, College of
Department of Applied Sciences and Mathematics
http://technology.asu.edu/dasm
SANTN 330
technology@asu.edu
480-727-1874

## Applied Biological Sciences (Wildlife \& Restoration Ecology), BS (TSABSRBS)

## Campus: POLY

Program Description: The wildlife and restoration ecology concentration, under the B.S. in applied biological sciences degree, focuses on the application of ecological principles to the management of wildlife and the restoration of ecosystems. The
concentration examines the management of wildlife species and their habitat and emphasizes the reconstruction of degraded ecosystems, to improve ecological structure and function and meet societal needs for sustainable and functional ecosystems.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.

Career Opportunities: Graduates can pursue numerous entry-level careers in biology. Specific career fields include secondary education, wildlife and restoration ecology and urban horticulture. Employment opportunities exist in both private and public sectors. The general program in applied biological sciences also prepares graduates to succeed in graduate or professional schools in disciplines such as:

- Animal health.
- Dentistry.
- Ecology.
- Environmental biotechnology.
- Horticulture.
- Medicine.
- Physical therapy.
- Wildlife biology.


## Contact Information:

Technology and Innovation, College of
Department of Applied Sciences and Mathematics
http://technology.asu.edu/dasm
SANTN 330
technology@asu.edu
480-727-1874

## Applied Computer Science, BS (TSACSBS)

## Campus: POLY

Program Description: The B.S in applied computer science provides students with an education that targets the computing profession. Students will learn to use mathematics, science and economics, along with technological knowledge and skill in the application of programming languages and software processes, to design, analyze, implement and test software systems and applications. The program is problem and project based, utilizing the languages, tools and methods of computing best practices.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.

Career Opportunities: Graduates find opportunities as members of an engineering team in software applications areas such as the Web, databases, limited devices (cell phones), networks and security. The current demand for software and computer hardware personnel is high, and the starting salaries for these employees are typically well above the average.

## Contact Information:

Technology and Innovation, College of
Department of Engineering
http://technology.asu.edu/engineering/
SANTN 330
technology@asu.edu
480-727-2727

## Applied Psychology, BS (ECPSYBS)

## Campus: POLY

Program Description: What do the design of the latest technological devices, training of elite athletes, and exploring the impact of texting on driving have in common? All of these problems are tackled by applied psychologists. A broad range of professions need experts in human performance to work on problems that involve design, training and assessment. If you are interested in human perception, cognition, innovation or group processes, then applied psychology is for you.
Applied psychology offers a traditional psychology core preparation, leading to graduate school and/or to applications in human factors with emphasis on human-computer interaction, aviation and manufacturing. The rigorous program provides strong preparation for further graduate study in psychology.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N .
First Required Math Course: MAT 170 Precalculus.

Career Opportunities: Most careers in psychology require a master's or a doctoral degree, but with an emphasis in human factors, an undergraduate degree can lead to many lucrative employment opportunities. We routinely place our top undergraduate students in internships in government laboratories or at leading companies in the fields of technology, training and transportation, and many of these opportunities turn into careers. Our emphasis on usability design and applied experimental and statistical methodologies provide students with a skill set that is highly sought by today's leading businesses.

## Contact Information:

Technology and Innovation, College of
Faculty of Applied Psychology
http://technology.asu.edu/appliedpsych
SANTN 330
technology@asu.edu
480-727-1874

## Applied Science, BAS (TSAPSBAS)

Campus: POLY

Program Description: The B.A.S. program is a flexible degree plan designed specifically for students who hold an Associate of Applied Science (A.A.S.) from an accredited community college. This major combines the technical experience gained in the student's associate degree program with a broader educational experience in management, leadership, critical thinking and communications. Students in the B.A.S. program select one of eight offered concentrations:

- Aviation management technology.
- Electronic and energy systems.
- Emergency management.
- Graphic information technology.
- Internet and Web development.
- Manufacturing technology and management.
- Operations management technology.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: $N$.
Second Language Requirement: N.

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (AAS) degree. This program is not available for freshmen.

Career Opportunities: The wide range of concentrations provides B.A.S. program graduates diverse career opportunities. B.A.S. program course work gives the graduate greater skills to be successful as a professional working in a technical area. B.A.S. graduates have the ability to supervise and manage people in highly specialized technical and service industry positions.

## Contact Information:

Technology and Innovation, College of
Dean, College of Technology and Innovation
http://technology.asu.edu
SANTN 330
technology@asu.edu
480-727-1874

## Applied Science (Aviation Management Technology), BAS (TSAMTABAS)

Campus: POLY

Program Description: The B.A.S. program is a flexible, 60-credit-hour degree designed specifically for students who have earned an A.A.S. from a regionally accredited institution.

The concentration in aviation management technology is for students who have received training and education in some aspect of the air transportation industry (other than aviation maintenance), such as flight certificates and ratings as part of their A.A.S. degree. Students learn management practices that prepare them for advanced positions in the aviation management field.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.

Career Opportunities: The concentration in aviation management technology is for students who have received training and education in some aspect of the air transportation industry (other than aviation maintenance), such as flight certificates and ratings as part of their A.A.S. degree. Students receive an orientation in management practices that prepares them for advanced positions in the aviation management field.

## Contact Information:

Technology and Innovation, College of
Dept of Tech Entrepreneurship and Innovation Mgmt
http://technology.asu.edu/aviation
SANTN 330
technology@asu.edu
480-727-1874

## Applied Science (Electronic Energy Systems), BAS (TSEESBAS) <br> Campus: POLY

Program Description: The B.A.S. program is a flexible, 60-credit-hour degree designed specifically for students who have earned an A.A.S. from a regionally accredited institution.

The electronic and energy systems concentration serves students with an electronics background via three paths or emphasis areas - alternative energy, electronic systems and integrated electronic systems (focused on the semiconductor industry).

The alternative energy technologies emphasis area explores various alternative energy resources. At the heart of the program is the solar-hydrogen cycle, a renewable energy scenario including the production of electricity from solar energy, and utilization of that
electricity to split water into its elemental parts. This program provides hands-on laboratory experience on energy conversion and storage technologies, including photovoltaics, fuel cells, batteries, electrolyzers and supercapacitors.
The electronic systems emphasis area allows students to continue to develop a knowledge of electrical/electronic fundamentals with an applications perspective and a focus on general topics of microcontrollers and advanced digital controllers and their use in industry.
The integrated electronic systems emphasis area covers the processes and technology used to develop, design, manufacture and exploit integrated electronic functions on silicon, in packages and on boards. The program provides hands-on laboratory experience in integrated circuit device fabrication and manufacturing in a setting that emulates industry.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.

Career Opportunities: Graduates with the alternative energy emphasis area are able to work in a number of different companies involved in alternative energy. These companies may be traditional energy production companies expanding into new production technologies, or start-up companies involved in solar energy or fuel cells.
Graduates with the electronic systems emphasis area are able to work as members of engineering teams in applied design, product development, manufacturing, production or operations. They may also be employed in technical services capacities, including field engineering, marketing or sales.
Graduates with the integrated electronic systems emphasis area work in integrated circuit processing, testing, field applications and as system integrators.

## Contact Information:

Technology and Innovation, College of
Department of Engineering Technology
http://technology.asu.edu/
SANTN 330
technology@asu.edu
480-727-1874

## Applied Science (Emergency Management), BAS (TSIMCEBAS)

Campus: POLY
Program Description: The B.A.S. program is a flexible, 60-credit-hour degree designed specifically for students who have earned an A.A.S. from a regionally accredited institution.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.

Career Opportunities: The concentration in emergency management opens the door to a challenging career as a professional emergency manager. The advancement of technology has created the potential for more devastating disasters than ever before. As a result, there is an increasing demand for emergency managers who have a solid foundation in scientific and technical disciplines as well as management skills.

## Contact Information:

Technology and Innovation, College of
Dept of Tech Entrepreneurship and Innovation Mgmt
http://technology.asu.edu/etm
SANTN 330
technology@asu.edu
480-727-1874

## Applied Science (Graphic Information Technology), BAS (TSGITBAS)

## Campus: POLY

Program Description: The B.A.S. program is a flexible, 60-credit-hour degree designed specifically for students who have earned a relevant A.A.S. from a regionally accredited institution.
The concentration in graphic information technology prepares graduates in the cross-media graphic industry that includes:

- 3-D modeling.
- Animation.
- Commercial digital photography.
- Gaming.
- Internet and Web development.
- Multimedia.
- Printing and digital publishing.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: $N$.

Second Language Requirement: N.

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.

Career Opportunities: Graduates of the program, which combines technical course work with management content, are prepared to assume supervisory positions in industry such as:

- Web developer.
- Art director.
- Animation specialist.
- Commercial photographer.
- Customer service representative.
- Graphic designer.
- Plant manager.
- Production manager.
- Quality assurance manager.

The technical graphics option prepares graduates for positions in industries implementing technical and engineering graphics in computer aided design and computer integrated manufacturing.
The website design option prepares graduates for careers in the ever-expanding arena of website design and publishing. The digital publishing option prepares graduates for lead technical and entry-level management positions in the printing and publishing industry.
The digital media management option prepares graduates for technical positions in industries implementing, planning, and producing interactive communications.

## Contact Information:

Technology and Innovation, College of

## Applied Science (Internet \& Web Development), BAS (TSIWDBAS)

Campus: ONLNE, POLY

Program Description: The B.A.S. program is a flexible, 60-credit-hour degree designed specifically for students who have earned a relevant A.A.S. from a regionally accredited institution.
The concentration in Internet and Web development focuses on the development of internet sites, including security, usability, ecommerce, server and client side issues, and cross-media graphic applications. All courses for this program are available online.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.

Career Opportunities: This degree prepares graduates for careers in the ever-expanding arena of website design and publishing.

## Contact Information:

Technology and Innovation, College of
Dept of Tech Entrepreneurship and Innovation Mgmt
http://technology.asu.edu/git
SANTN 330
technology@asu.edu
480-727-1874

## Applied Science (Manufacturing Technology \& Management), BAS (TSMETFBAS)

Campus: POLY

Program Description: The B.A.S. program is a flexible, 60-credit-hour degree designed specifically for students who have earned an A.A.S. from a regionally accredited institution.

The manufacturing technology and management concentration provides a broad understanding of the complex world of manufacturing.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: $N$.
Second Language Requirement: N .

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.

Career Opportunities: Typically, students who graduate with this B.A.S. concentration work in manufacturing, production or operations.

Contact Information:

Technology and Innovation, College of
Department of Engineering Technology
http://technology.asu.edu/engrtech
SANTN 330
technology@asu.edu
480-727-1784

## Applied Science (Operations Management), BAS (TSIMCOBAS)

Campus: ONLNE, POLY
Program Description: The B.A.S. program is a flexible, 60-credit-hour degree designed specifically for students who have earned an A.A.S. from a regionally accredited institution.

The concentration in operations management technology provides the tools needed for success as a manager. An effective manager is someone who:

- Effectively utilizes the resources available to create quality products and/or services and accomplishes unit goals.
- Hires qualified workers that can do the job or can be trained/educated to perform the job.
- Motivates and develops the workforce.
- Organizes work.
- Understands the work environment and creates a safe and healthful work environment.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N. <br> Second Language Requirement: N.

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.

Career Opportunities: The B.A.S. in operations management technology prepares undergraduate students for supervisory and management functions in industry, manufacturing, public service and other service organizations.

## Contact Information:

Technology and Innovation, College of
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## Applied Science (Software \& Computing Systems), BAS (TSCSTBAS)

Campus: POLY
Program Description: The B.A.S. program with a concentration in software and computing systems is a 60-credit-hour degree designed specifically for students who have earned an A.A.S. from a regionally accredited institution. Students are expected to have an A.A.S. with course work in object-oriented programming, data structures and microcomputer organization/assembly language programming to enroll in upper-division major courses. Upper division course work and laboratories are offered in two emphasis areas, culminating in a capstone senior project.
The computer systems administration area will broaden and deepen knowledge in networked computer systems. Graduates will be prepared to specify, install, maintain and administer various computer-networking systems.
The cyber security area will broaden and deepen knowledge in securing systems, intrusion detection and various other aspects of information assurance and cyber forensics. Graduates will understand the various threats to computer-networking systems and best practices for securing systems from these threats.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N. <br> Second Language Requirement: N .

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.

Career Opportunities: The B.A.S. exposes students to advanced concepts and critical thinking skills that prepare them for expanded career opportunities and professional advancement. Graduates from this concentration are prepared to work in systems administration and cybersecurity for internet and telecommunication companies, a wide variety of information technology providers and information technology centers within most midsize to large corporations. Demand for graduates with these skills continues to rise even while the job market in many other areas is stagnant or declining.

## Contact Information:

Technology and Innovation, College of
Department of Engineering
http://technology.asu.edu/engineering
SANTAN 330
technology@asu.edu
480-727-1874

## Computer Systems (Computer Hardware Technology), BS (TSCSTHBS)

Campus: POLY

Program Description: The computer hardware technology concentration, under the B.S. in computer systems, offers students the opportunity to develop knowledge and skills in the broad area of digital systems, computer hardware and computer network applications. Current computing industry needs drive the program's curriculum. The computer systems program uses mathematics, science and economics along with technological knowledge and skill in the application of programming languages, computer hardware, operating systems and networking to design, analyze, implement and test systems that integrate hardware and low-level software. The program is problem-based with exercises utilizing the languages, tools and methods of computing best practices.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.

Career Opportunities: Graduates find employment opportunities as members of engineering teams working in computer hardware technology, systems development and system analysis. The current demand for highly trained software and computer hardware personnel is high, and the starting salaries for these employees are typically well above the average.

## Contact Information:

Technology and Innovation, College of
Department of Engineering
http://technology.asu.edu/engineering/
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## Computer Systems (Embedded Systems Technology), BS (TSCSTMBS)

Campus: POLY

Program Description: The embedded systems technology concentration, under the B.S. in computer systems, provides students with an opportunity to develop knowledge and skills in the broad area of digital systems, computer hardware and computer network applications. Current computing industry needs drive the program's curriculum. The computer systems program uses mathematics, science and economics along with technological knowledge and skill in the application of programming languages, computer hardware, operating systems and networking to design, analyze, implement and test systems that integrate hardware and low-level software. The program is problem-based with exercises utilizing the languages, tools and methods of computing best practices.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 243 Discrete Math Structures.

Career Opportunities: Graduates find employment opportunities as members of engineering teams working in computer embedded systems technology, systems development and system analysis. The current demand for highly trained software and computer hardware personnel is high, and the starting salaries for these employees are typically well above the average.

## Contact Information:

Technology and Innovation, College of
Department of Engineering
http://technology.asu.edu/engineering/
SANTN 330
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480-727-1874

## Electronics Engineering Technology (Alternative Energy Technologies), BS (TSEETABS) Campus: POLY

Program Description: Students in this program are people who enjoy the practice of engineering technology. As graduates, they often work as members of design and development teams, cooperating with other people both in and outside their company. The emphasis in this program is placed on understanding how engineering technology principles are applied in practice. The electronics engineering technology program has a practice-based approach and uses both laboratories and industry projects to make electronics engineering real to students. All the faculty teaching in the program have industry experience.
The goal of the curriculum is to serve the needs of students interested in the applied aspects of electronics engineering at the baccalaureate level. Major components of the program include:

- Design.
- Electronics-related technical courses.
- Engineering science.
- General education.
- Science and mathematics.

The first two years of curriculum include fundamental courses in English, chemistry, math and engineering science (e.g., circuits, devices, and digital electronics).Students customize their degree with a specialized concentration.
The alternative energy technologies concentration, under the B.S. in electronics engineering technology, explores the demands of energy resources in the new economy. This program strives to educate individuals in the use of energy sources such as solar, wind, ocean, geothermal and biomass. At the heart of the program is the concept of the solar-hydrogen cycle, an energy scenario including production of electricity from solar energy, and utilization of that electricity to split water into its elemental parts. This program provides hands-on laboratory experience on several energy conversion and storage technologies including photovoltaics, fuel cells, batteries, electrolyzers and supercapacitors. Thus, graduates are able to face the challenge of helping to improve the human quality of life, putting new innovative products into the marketplace and providing society with technological leadership.
This program is accredited by the Technology Accreditation Council (TAC) of ABET.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 265 Calculus for Engineers I.
Career Opportunities: Graduates have an understanding of energy and power technology, the contribution of materials and components to the performance of electronic systems and how to exploit the power of integrated electronics to enhance productivity and technology solutions. The alternative energy technologies concentration is aimed at preparing graduates for careers in alternative energy as related to electric power conditioning, control systems, electronics and instrumentation. The specific positions might include:

- Application interface.
- Environmental and reliability analysis.
- Policy analysis.
- Process control.
- System design.
- Technology analysis.


## Contact Information:

Technology and Innovation, College of
Department of Engineering Technology
http://technology.asu.edu/engrtech
TECH 101
technology@asu.edu
480-727-1584

## Electronics Engineering Technology (Electronic Systems), BS (TSEETEBS)

Campus: POLY
Program Description: Students in this program are people who enjoy the practice of engineering technology. As graduates, they often work as members of design and development teams, cooperating with other people both in and outside their company. The emphasis in this program is placed on understanding how engineering technology principles are applied in practice. The electronics engineering technology program has a practice-based approach and uses both laboratories and industry projects to make electronics engineering real to students. All the faculty teaching in the program have industry experience.
The goal of the curriculum is to serve the needs of students interested in the applied aspects of electronics engineering at the baccalaureate level. Major components of the program include:

- Design.
- Electronics-related technical courses.
- Engineering science.
- General education.
- Science and mathematics.

The first two years of curriculum include fundamental courses in English, chemistry, math and engineering science (e.g., circuits, devices, and digital electronics). Students customize their degree with a specialized concentration.
The field of electronics engineering technology applies mathematics, science and economics, along with state-of-the-art electronics techniques, materials and devices to solve technological problems and to produce useful products. The concentration in electronic systems, under the B.S. in electronics engineering technology, allows students to develop a broad-based knowledge of electrical/electronic fundamentals with an applications perspective.
This program is accredited by the Technology Accreditation Commission (TAC) of ABET.
This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of

Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 265 Calculus for Engineers I.
Career Opportunities: Graduates have an understanding of energy and power technology, the contribution of materials and components to the performance of electronic systems and how to exploit the power of integrated electronics to enhance productivity and technology solutions. The electronic systems concentration prepares persons for careers in control, electronics, instrumentation and power systems applications. Engineering technologists typically work as members of engineering teams in applied design, product development, manufacturing, production or operations. They may also be employed in technical services capacities, including field engineering, marketing or sales.

## Contact Information:

Technology and Innovation, College of
Department of Engineering Technology
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## Electronics Engineering Technology (Integrated Electronic Systems), BS (TSEETINBS) Campus: POLY

Program Description: Students in this program are people who enjoy the practice of engineering technology. As graduates, they often work as members of design and development teams, cooperating with other people both in and outside their company. The emphasis in this program is placed on understanding how engineering technology principles are applied in practice. The electronics engineering technology program has a practice-based approach and uses both laboratories and industry projects to make electronics engineering real to students. All the faculty teaching in the program have industry experience.
The goal of the curriculum is to serve the needs of students interested in the applied aspects of electronics engineering at the baccalaureate level. Major components of the program include:

- Design.
- Electronics-related technical courses.
- Engineering science.
- General education.
- Science and mathematics.

The first two years of curriculum include fundamental courses in English, chemistry, math and engineering science (e.g., circuits, devices, and digital electronics). Students customize their degree with a specialized concentration.
The integrated electronic systems concentration, under the B.S. in electronics engineering technology, explores the processes and technology used to develop, design, manufacture and exploit integrated electronic functions on silicon, in packages and on boards. The program provides hands-on laboratory experience in integrated circuit device fabrication and manufacturing in a setting that emulates industry.
This program is accredited by the Technology Accreditation Council (TAC) of ABET.
This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 265 Calculus for Engineers I.
Career Opportunities: Graduates have an understanding of energy and power technology, the contribution of materials and components to the performance of electronic systems and how to exploit the power of integrated electronics to enhance
productivity and technology solutions. Upon completion of this concentration, graduates are prepared for careers in microelectronics industry. Graduates secure positions in integrated circuit processing, testing, field applications, system integrators and as members of diverse scientific engineering teams.

## Contact Information:

Technology and Innovation, College of Department of Engineering Technology
http://technology.asu.edu/engrtech
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## Engineering, BSE (TSEGRBSE)

Campus: POLY

Program Description: The emerging problems that engineers must solve require a broad set of interdisciplinary skills. Engineers are challenged with:

- Designing innovative products.
- Improving the quality of life for humankind.
- Preparing for potential catastrophes.
- Providing society with technological leadership.

The B.S.E. is a unique program designed to produce creative engineers who can meet these challenges. The structure of this degree program is flexible and responsive to emerging engineering fields. The program integrates a broad knowledge base with study in multiple focus areas, providing both breadth and depth. This provides a greater flexibility in curricular and career pathways allowing for multidisciplinary experiences and novel combinations of expertise. It approaches this task by a heavy reliance on projects in which student teams design and build devices that solve realistic problems. Students in the program design and implement an engineering project every semester.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: Y .

Second Language Requirement: $N$.
First Required Math Course: MAT 265 Calculus for Engineers I.
Transfer Agreements: ASU has partnered with the following institutions to enable you to do a seamless transfer: Maricopa County Community College District.

Career Opportunities: Engineers normally work as a member of a team that is designing, manufacturing and delivering technological objects and services. These teams are often multidisciplinary and employers frequently seek specific technical skills as opposed to a specific type of engineering degree. While large corporations and governments employ many engineers, others work in small companies or start companies of their own.

## Contact Information:

Technology and Innovation, College of
Department of Engineering
http://technology.asu.edu/engineering/
SANTN 330
technology@asu.edu
480-727-1874

## Environmental Technology Management, BS (TSETMBS)

Campus: POLY

Program Description: Environmental technology management is designed to provide graduates with the critical scientific, technical and management skills needed to solve the environmental challenges faced by industry and by society in today's highly regulated and competitive business climate. The B.S. in environmental technology management curriculum includes courses in biology, chemistry, physics, calculus, computer science and statistics. The core of course work includes courses in:

- Emergency management.
- Environmental chemistry.
- Environmental law.
- International environmental management.
- Occupational hygiene.
- Technologies for control of air pollution, water treatment and hazardous waste remediation.

In addition to the technical course, students take courses in technical communications and project management.
This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.

Career Opportunities: Graduates are prepared to be environmental managers in an industrial setting, to work in an environmental regulatory agency or to work for an environmental engineering firm. Industry and government entities value environmental technology management graduates because they have a practical and solid understanding of not only the scientific and technical aspects of controlling environmental pollution, but also the economic, political and legal problems facing managers in today's business climate.

## Contact Information:

Technology and Innovation, College of
Dept of Tech Entrepreneurship and Innovation Mgmt
http://technology.asu.edu/etm
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480-727-1781

## Food Industry Management, BS (BAFIMBS)

Campus: POLY
Program Description: Students will combine core courses in other business disciplines (finance, marketing, management, accounting, supply chain management and economics) with upper division courses specific to the food industry. Students will select from courses in:

- Environmental management and sustainability.
- Food industry sales and management.
- Food marketing strategy.
- Food supply networks.
- Food retailing.
- Futures and options markets.
- Innovation and food product development.
- Insurance.
- Pricing and promotion strategy in food markets.
- Retail information analysis.
- Risk management.

Each of these courses addresses a different issue in which fundamental concepts, theoretical approaches and analytical methods and industry practice are unique to the food industry so cannot be obtained in a traditional business degree. There are no
comparable programs in the U.S. Southwest, but peer and aspirational peer institutions to ASU offer similar programs and report excellent placement rates and graduating salaries.

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 210 Brief Calculus.
Career Opportunities: The B.S. in food industry management prepares students for business careers in the food industry, which is defined as the group of firms and organizations that are involved with manufacturing, marketing and distributing food beyond the farm to retail stores, restaurants and institutions such as schools and hospitals. Employing one in six people nationwide and 100,000 in Arizona alone, there is a growing demand for professional management in an industry that is becoming increasingly competitive, sophisticated and global.Potential careers for B.S. food industry management graduates in these firms include, but are not limited to:

- Brand manager for a food manufacturing firm.
- Commodities trader for an investment bank or hedge fund.
- District manager for a food retailer.
- Loan officer for a bank with a food-industry portfolio or a host of other highly paid occupations.


## Contact Information:

Technology and Innovation, College of
Morrison School of Agribusiness and Resource Mgmt
http://morrison.asu.edu/msma/
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480-727-1055

## Graphic Information Technology, BS (TSGITBS)

## Campus: POLY

Program Description: The cross-media nature of the graphic information industry requires tomorrow's graduates to understand the full spectrum of graphic technology, reproduction processes and current business practices. The B.S. in graphic information technology degree program prepares graduates for a seamless career as a graphic technologist encompassing web development and internet technologies, printing and digital publishing, and commercial and technical imaging. This is an intensive program of study emphasizing theory and hands-on laboratory practice. Students develop the following skills:

- Web development and interactive technologies.
- Commercial and technical photography.
- Gaming and simulation technologies.
- Computer drawing and illustration.
- Technical document design.
- E-commerce practices.
- Higher-level graphic programming languages.
- Multimedia and 3-D modeling.
- Premedia, digital publishing, and print technologies.
- Project management.
- Quality assurance.

The National Association of Industrial Technology professionally accredits the graphic information technology program.
This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: N.
Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.

Career Opportunities: Graphic information technology prepares graduates for technical and management positions in the diverse graphic communication and information technology industries, such as:

- Internet and web development.
- Commercial and technical imaging.
- Premedia, digital printing and publishing.
- Planning and evaluation of print, Internet, multimedia and computer-based communications.
- Management of graphic information assets.
- Quality assurance of graphic products.
- Technical/digital media production.


## Contact Information:

Technology and Innovation, College of
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## Manufacturing Engineering Technology, BS (TSMETBS)

Campus: POLY

Program Description: Students in this program are people who like to make things, especially making them better, faster and at a lower cost. They are "hands-on" people who also want to be a part of the design process and they enjoy working with people as part of a team or as its leader.
The manufacturing engineering technology program educational approach focuses on producing a work-ready graduate by incorporating knowledge practicing manufacturing engineers use in their work in industry. This is accomplished by students via the use of equipment typical of that found in industry. All faculty in the program have industry experience.
Major components of the program include:

- Design.
- Engineering science.
- General education.
- Manufacturing-related technical courses.
- Mathematics.
- Physics.

The first two years of curriculum include:

- Chemistry.
- English.
- Manufacturing and materials.
- Math.
- Technical science (e.g., statics).

The manufacturing engineering technology program has an approach that uses both laboratories and industry projects to make manufacturing real to students.
Teamwork is emphasized across the curriculum. Industry emphasizes the importance of working (and solving technical problems) as a team. Student groups are used in first year classes and continue through the senior year. Senior projects extend from the planning stage to manufacturing and final assembly. These projects are typically from industry and provide students an opportunity to work on real manufacturing and design problems.
This program is accredited by the Technology Accreditation Commission (TAC) of ABET.
This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.

Career Opportunities: Graduates from Arizona State University's manufacturing engineering technology program apply their professional skills in companies across the United States. Typical job responsibilities include acting as a liaison between design engineering and the manufacturing operation or being deeply involved in manufacturing process development. Career employment opportunities include:

- Design and development.
- Direct manufacturing support.
- Management.
- Quality control and assurance.
- Sales.

Companies large and small, in this region and outside, provide a wide range of opportunities for graduates. Due to their strong, practical engineering skill set, graduates are very valuable in small companies or new start-up companies. Our graduates are well placed and command top salaries in their engineering careers.

## Contact Information:

Technology and Innovation, College of
Department of Engineering Technology
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## Manufacturing Engineering Technology (Mechanical), BS (TSMETMBS)

Campus: POLY

Program Description: Students in this program are people who like to make things, especially making them better, faster and at a lower cost. They are "hands-on" people who also want to be a part of the design process and they enjoy working with people as part of a team or as its leader.
The manufacturing engineering technology program's educational approach focuses on producing a work-ready graduate by incorporating knowledge practicing manufacturing engineers use in their work in industry. This is accomplished by students learning by doing via the use of equipment typical of that found in industry. All faculty in the program have industry experience.
Major components of the program include:

- Design.
- Engineering science.
- General education.
- Manufacturing-related technical courses.
- Mathematics.
- Physics.

The first two years of curriculum include:

- Chemistry.
- English.
- Manufacturing and materials.
- Math.
- Technical science (e.g., statics).

The manufacturing engineering technology program has a practice-based approach and uses both laboratories and industry projects to make manufacturing real to students.
Teamwork is emphasized across the curriculum. Industry emphasizes the importance of working (and solving technical problems) as a team. Student groups are used in first year classes and continue through the senior year. Senior projects extend from the planning
stage to manufacturing and final assembly. These projects are typically from industry and provide students an opportunity to work on real manufacturing and design problems.
Students can customize manufacturing engineering technology degree with a specialized mechanical concentration. The mechanical engineering technology concentration offers manufacturing students an emphasis in mechanics and design.
This program is accredited by the Technology Accreditation Commission (TAC) of ABET.
This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: Y.
Second Language Requirement: $N$.
First Required Math Course: MAT 170 Precalculus.
Career Opportunities: Graduates from Arizona State University's manufacturing engineering technology program apply their professional skills in companies across the United States. Typical job responsibilities include acting as a liaison between design engineering and the manufacturing operation or being deeply involved in manufacturing process development.
Graduates often achieve employment as manufacturing engineers. The mechanical concentration enables students to also work in the design field where interfacing with manufacturing operations is important.
Career employment opportunities include:

- Design and development.
- Direct manufacturing support.
- Management.
- Quality control and assurance.
- Sales.

Companies large and small, in this region and outside, provide a wide range of opportunities for graduates. Due to their strong, practical engineering skill set, graduates are very valuable in small companies or new start-up companies. Our graduates are well placed and command top salaries in their engineering careers.

## Contact Information:

Technology and Innovation, College of
Department of Engineering Technology
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## Mechanical Engineering Technology, BS (TSMECBS)

Campus: POLY

Program Description: Students in this program are people who enjoy the practice of engineering technology. The emphasis in the program is placed on understanding how engineering principles are applied in practice. Graduates have an understanding of:

- The behavior of fluids.
- The design of machines and components.
- Energy and power technology.
- Engineering measurements.
- The selection of machine components.

The mechanical engineering technology program has a practice-based approach and uses both laboratories and industry projects to make mechanical engineering real to students. All faculty teaching in the program have industry experience.
The goal of the curriculum is to serve the needs of students interested in the applied aspects of mechanical engineering, including aircraft and their systems, at the baccalaureate level. Major components of the program include:

- Basic science and mathematics.
- Design.
- Engineering science.
- General education.
- Mechanical-related technical courses.

The first two years of curriculum include fundamental courses in:

- Chemistry.
- Engineering science (e.g., statics and mechanics' of materials).
- English.
- Manufacturing processes.
- Materials.
- Math.

This program is accredited by the Technology Accreditation Council (TAC) of ABET.
This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.
Career Opportunities: As graduates, they often work as members of design and development teams, cooperating with other people both in and outside of their company. The B.S. in mechanical engineering technology and its specialty concentrations offer great flexibility in both type of work and location. Employment opportunities exist in companies that design, develop, manufacture, implement, and improve products, machinery, and systems. Employment areas include engineering design, manufacturing, and research and development. Companies large and small, in this region and elsewhere, provide a wide range of opportunities for graduates.

## Contact Information:

Technology and Innovation, College of
Department of Engineering Technology
http://technology.asu.edu/engrtech
SIM 295
technology@asu.edu
480-727-1584

## Mechanical Engineering Technology (Aeronautical Engineering Technology), BS (TSMECEBS)

Campus: POLY

Program Description: Students in this program are people who enjoy the practice of engineering technology. The emphasis in the program is placed on understanding how engineering principles are applied in practice. Graduates have an understanding of:

- The behavior of fluids.
- The design of machines and components.
- Energy and power technology.
- Engineering measurements.
- The selection of machine components.

The mechanical engineering technology program has a practice-based approach and uses both laboratories and industry projects to make mechanical engineering real to students. All faculty teaching in the program have industry experience.
The goal of the curriculum is to serve the needs of students interested in the applied aspects of mechanical engineering, including aircraft and their systems, at the baccalaureate level. Major components of the program include:

- Basic science and mathematics.
- Design.
- Engineering science.
- General education.
- Mechanical-related technical courses.

The first two years of curriculum include fundamental courses in:

- Chemistry.
- Engineering science (e.g., statics and mechanics' of materials).
- English.
- Manufacturing processes.
- Materials.
- Math.

The aeronautical concentration provides a specialization in aircraft. Students take classes in aircraft design, structures and aerodynamics.
This program is accredited by the Technology Accreditation Council (TAC) of ABET.
This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: Y.
Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.

Career Opportunities: As graduates, they often work as members of design and development teams, cooperating with other people both in and outside of their company. The B.S. in mechanical engineering technology and its specialty concentrations offer great flexibility in both type of work and location. Employment opportunities exist in companies that design, develop, manufacture, implement and improve products, machinery and systems. Employment areas include engineering design, manufacturing, and research and development. Companies large and small, in this region and elsewhere, provide a wide range of opportunities for graduates.

## Contact Information:

Technology and Innovation, College of
Department of Engineering Technology
http://technology.asu.edu/engrtech
SIM 295
technology@asu.edu
480-727-1584

## Mechanical Engineering Technology (Automation Engineering Technology), BS (TSMECUBS)

 Campus: POLYProgram Description: The emphasis in the program is placed on understanding how engineering principles are applied in practice. Graduates have an understanding of:

- The behavior of fluids.
- The design of machines and components.
- Energy and power technology.
- Engineering measurements.
- The selection of machine components.

The mechanical engineering technology program has a practice-based approach and uses both laboratories and industry projects to make mechanical engineering real to students. All faculty teaching in the program have industry experience.
The goal of the curriculum is to serve the needs of students interested in the applied aspects of mechanical engineering, including aircraft and their systems, at the baccalaureate level. Major components of the program include:

- Basic science and mathematics.
- Design.
- Engineering science.
- General education.
- Mechanical-related technical courses.

The first two years of curriculum include fundamental courses in:

- Chemistry.
- Engineering science (e.g., statics and mechanics of materials).
- English.
- Manufacturing processes.
- Materials.
- Math.

The automation concentration provides a specialization in machine and process automation. Automated assembly and testing are major components of most modern mechanical systems and manufacturing operations.
This program is accredited by the Technology Accreditation Council (TAC) of ABET.
This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: Y.

Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.

Career Opportunities: As graduates, they often work as members of design and development teams, cooperating with other people both in and outside of their company. The B.S. in mechanical engineering technology and its specialty concentrations offer great flexibility in both type of work and location. Employment opportunities exist in companies that design, develop, manufacture, implement, and improve products, machinery, and systems. Employment areas include engineering design, manufacturing, and research and development. Companies large and small, in this region and elsewhere, provide a wide range of opportunities for graduates.

## Contact Information:

Technology and Innovation, College of
Department of Engineering Technology
http://technology.asu.edu/engrtech
SIM 295
technology@asu.edu
480-727-1584

## Mechanical Engineering Technology (Automotive), BS (TSMECTBS) <br> Campus: POLY

Program Description: Students in this program are people who enjoy the practice of engineering technology. The emphasis in the program is placed on understanding how engineering principles are applied in practice. Graduates have an understanding of:

- The behavior of fluids.
- The design of machines and components.
- Energy and power technology.
- Engineering measurements.
- The selection of machine components.

The mechanical engineering technology program has a practice-based approach and uses both laboratories and industry projects to make mechanical engineering real to students. All faculty teaching in the program have industry experience.

The goal of the curriculum is to serve the needs of students interested in the applied aspects of mechanical engineering, including aircraft and their systems, at the baccalaureate level. Major components of the program include:

- Basic science and mathematics.
- Design.
- Engineering science.
- General education.
- Mechanical-related technical courses.

The first two years of curriculum include fundamental courses in:

- Chemistry.
- Engineering science (e.g., statics and mechanics of materials).
- English.
- Manufacturing processes.
- Materials.
- Math.

The automotive concentration provides a specialization in vehicle design. A novel concentration course configuration is based on the functional structure of an automotive company and emphasizes system integration.
This program is accredited by the Technology Accreditation Council (TAC) of ABET.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

Additional Program Fee: Y.
Second Language Requirement: N .
First Required Math Course: MAT 170 Precalculus.
Career Opportunities: As graduates, they often work as members of design and development teams, cooperating with other people both in and outside of their company. The B.S. in mechanical engineering technology and its specialty concentrations offer great flexibility in both type of work and location. Employment opportunities exist in companies that design, develop, manufacture, implement, and improve products, machinery, and systems. Employment areas include engineering design, manufacturing, and research and development. Companies large and small, in this region and elsewhere, provide a wide range of opportunities for graduates.

## Contact Information:

Technology and Innovation, College of
Department of Engineering Technology
http://technology.asu.edu/engrtech
SIM 295
technology@asu.edu
480-727-1584

## Software Engineering, BS (TSSERBS)

## Campus: POLY

Program Description: The program blends engineering, computing, project leadership and technology education. Software systems are complex, often including in excess of a million lines of code. Graduates of the B.S. in software engineering will possess knowledge and skills of a defined engineering approach to complex systems analysis, planning, design and construction. The program is a unique project-driven curriculum, establishing a new model for software engineering education. The program is built around the concepts of engaged learning, discovery-based education and learn-by-doing. Students complete projects in every semester of the program to provide emphasis in communication, team-work, communication, critical thinking and professionalism. Students have a high degree of flexibility in designing their course of study; they select a software engineering application area as their primary focus, and they may obtain interdisciplinary knowledge through a secondary area of their choosing.

## Additional Program Fee: Y.

Second Language Requirement: N.

Career Opportunities: Software engineers solve a broad set of interdisciplinary problems and apply new technologies to improve the quality of life. Graduates design and engineer innovative systems that may include mechanical and electrical components that interact with software. The B.S. in software engineering is a unique program where students learn by solving engaging projects, commonly as a member of a development team. The program prepares graduates for advanced study in computing, an allied field or to enter the computing profession, most commonly as an application software engineer. According to the Bureau of Labor Statistics, software engineers are highly paid and there is significant growth in the number of employment opportunities. Some software engineering jobs may include creating video games; designing embedded systems; developing distributed applications; creating Web applications; or working on data, network, security or computer system administration.

## Contact Information:

Technology and Innovation, College of
Department of Engineering
http://technology.asu.edu/engineering
SANTAN 230
egr@asu.edu
480-727-2727

## Technological Entrepreneurship and Management, BS (TSTEMBS) <br> Campus: ONLNE, POLY

Program Description: If you have an interest in business and technology, the technological entrepreneurship and management program combines the best of both worlds. This program is ideal for those students who are comfortable with technology, see the importance of understanding science and technical systems but want to function more on the process or project management side, and perhaps even start their own business.
In the technological entrepreneurship and management program, students get a solid foundation in technological entrepreneurship and innovation methods with a grounding in business fundamentals.
Focus areas include:

- Product design and development.
- Alternative energy entrepreneurship.
- Process innovation.
- Social entrepreneurship.
- Digital media entrepreneurship.

All focus areas will concentrate on technology-based entrepreneurship and innovation with a focus on business development and growth. The focus areas include faculty from various disciplines throughout the College of Technology and Innovation.

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: POLY campus. Students from Western states, who select this major and campus, may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program (http://students.asu.edu/admission/wue).

## Additional Program Fee: N.

Second Language Requirement: N.
First Required Math Course: MAT 170 Precalculus.

Career Opportunities: Our economy is driven by companies and individuals that turn creative ideas into new products, services and solutions. Innovative and entrepreneurial application of science and technology are the basis for the solutions to today's most challenging problems. Students develop critical thinking skills and a systems perspective as they learn how to function on interdisciplinary teams to design and deliver new products and services. Students also learn how to conceive and develop business models that lead to sustainable enterprise.
This degree will allow you to work as a consultant, a business developer, a project manager or as an entrepreneur.
Example types of careers include business development, consultant, project manager, entrepreneur, product manager, innovation manager, quality manager or technician, market analyst or planning, marketing consultant, strategic planner or analyst, venture capitalist, operations manager, six sigma or lean six sigma program manager.

## Contact Information:

Technology and Innovation, College of
Dept of Tech Entrepreneurship and Innovation Mgmt
http://technology.asu.edu/
SANTN 330
technology@asu.edu
480-727-1874

## Undergraduate Exploratory Programs (Program Descriptions)

## University College

## Exploratory Health \& Life Sciences, Pre-Prof/E (UCHSCIEXPL)

Campus: DTPHX, POLY, TEMPE, WEST
Program Description: The exploratory health and life sciences track affords students an opportunity to explore a variety of majors related to the health and life science professions. For a complete list of all majors associated with this exploratory track, reference http://uc.asu.edu/advising.

## Additional Program Fee: N.

Second Language Requirement: N.
Admission Requirements: Students with fewer than 45 college credit hours are admissible to this exploratory track. This is not a degree-granting track; therefore, students must declare an ASU major prior to completing 45 college credit hours.

Career Opportunities: Career opportunities are specific to the ultimate major of choice.

Contact Information:
University College
University College
http://uc.asu.edu/
UASB 129
exploratory@asu.edu
480-965-4464

## Exploratory Humanities, Fine Arts \& Design, Pre-Prof/E (UCHUFAEXPL)

Campus: DTPHX, POLY, TEMPE, WEST

Program Description: The exploratory humanities, fine arts, and design track affords students an opportunity to explore a variety of majors related to the humanities, fine arts, and design professions. For a complete list of all majors associated with this exploratory track, reference http://uc.asu.edu/advising.

## Additional Program Fee: N.

Second Language Requirement: N.

Admission Requirements: Students with fewer than 45 college credit hours are admissible to this exploratory track. This is not a degree-granting track; therefore, students must declare an ASU major prior to completing 45 college credit hours.

Career Opportunities: Career opportunities are specific to the ultimate major of choice.

## Contact Information:

University College
University College
http://uc.asu.edu/
UASB 129

## Exploratory Math, Physical Sciences, Engineering \& Technology, Pre-Prof/E (UCEMTPEXPL) Campus: DTPHX, POLY, TEMPE, WEST

Program Description: The exploratory mathematics, physical sciences, engineering, and technology track affords students an opportunity to explore a variety of majors related to the mathematics, physical sciences, engineering, and technology professions. For a complete list of all majors associated with this exploratory track, reference http://uc.asu.edu/advising.

Additional Program Fee: N.
Second Language Requirement: $N$.

Admission Requirements: Students with fewer than 45 college credit hours are admissible to this exploratory track. This is not a degree-granting track; therefore, students must declare an ASU major prior to completing 45 college credit hours.

Career Opportunities: Career opportunities are specific to the ultimate major of choice.

## Contact Information:

University College
University College
http://uc.asu.edu/
UASB 129
exploratory@asu.edu
480-965-4464

## Exploratory Social \& Behavioral Sciences, Pre-Prof/E (UCSBSEXPL) <br> Campus: DTPHX, POLY, TEMPE, WEST

Program Description: The exploratory social and behavioral sciences track affords students an opportunity to explore a variety of majors related to the social and behavioral sciences, and business-related careers. For a complete list of all majors associated with this exploratory track, reference http://uc.asu.edu/advising.

Additional Program Fee: N.
Second Language Requirement: N.
Admission Requirements: Students with fewer than 45 college credit hours are admissible to this exploratory track. This is not a degree-granting track; therefore, students must declare an ASU major prior to completing 45 college credit hours.

Career Opportunities: Career opportunities are specific to the ultimate major of choice.

## Contact Information:

University College
University College
http://uc.asu.edu/
UASB 129
exploratory@asu.edu
480-965-4464

## Undergraduate Programs - Other (Program Descriptions)

## Pre-Health/Pre-Med Professions, Pre-Prof/E (LAMEDPRE)

Campus: DTPHX, POLY, TEMPE, WEST

Program Description: Students who are interested in pursuing a medical, dental or other health career can major in any area they wish, as long as they fulfill the particular professional school's prerequisite requirements. Successful applicants have majored in such diverse fields as:

- Art.
- Biology.
- Chemistry.
- Economics.
- Engineering.
- Music.
- Psychology

The Health Professions Advising office provides ongoing academic career advising for pre-health students who wish to pursue a career in:

- Chiropractic.
- Dentistry.
- Medicine.
- Naturopathy.
- Occupational therapy.
- Optometry.
- Pharmacy.
- Physical therapy.
- Physician assistant.
- Podiatry.
- Veterinary medicine.

Additional Program Fee: Y .
Second Language Requirement: N.
Admission Requirements: Students must meet the admission requirements of the major to which they apply.
Career Opportunities: The Health Professions Advising office is devoted to helping students make important decisions about their futures and assisting them with the technical aspects of the application process for professional health programs. The very competitive nature of admission to these programs makes it essential for students to work closely with the office from the beginning of their studies at ASU.

## Contact Information:

Dean, College of Liberal Arts and Sciences
http://prehealth.asu.edu
FULTN 135
prehealth@asu.edu
480-965-2365

## Pre-Law, Pre-Prof/E (LALAWPRE)

Campus: TEMPE
Program Description: There is no pre-law program in which a student can major at ASU. Law school admission policies do not favor one major over another, provided the pre-law student's chosen major requires substantive course work. Instead of recommending a single program, the Association of American Law Schools suggests that an undergraduate education develop certain skills, qualities, knowledge and insights essential to the law student and ultimately to the profession. All students interested in law school are encouraged to meet with a pre-law advisor in FULTN 135.

Additional Program Fee: N.
Second Language Requirement: N.

## Admission Requirements:

Career Opportunities: Pre-law advisors can help students make important decisions about their futures and assist them with the technical aspects of the application process for law school programs.

## Contact Information:

Dean, College of Liberal Arts and Sciences
http://prelaw.asu.edu
FULTN 135
clasundergrad@asu.edu
480-965-2365

## 4 I ARIZONA State UNIVERSITY

## 2011-2012 Major Map

## Accountancy, BS

W. P. Carey School of Business

Campus:Tempe, West
BAACCBS

| Term 1 0-17 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CIS 105: Computer Applications and Information Technology (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - See academic advisor for appropriate Student Success course requirement if not a first-time freshman. |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| ACC 194: Accountancy LEAP Program | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| PGS course (SB) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 17-18 |  |  |


| Term 2 18-33 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 ACC 232: Financial Accounting I | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| (1) Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 3 34-48 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| 1 ACC 242: Managerial Accounting I | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| 4 ECN 221: Business Statistics (CS) | 3 | C |  |
| SOC course (SB) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Milestone: The business skill courses are critical requirements that must be completed by the end of Term Three: CIS 105, MAT 210, ACC 231, ECN 211, MAT 211, ACC 241, ECN 212, ECN 221. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 49-64 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Minimum Grade | Notes |
| 4 ACC 340: External Reporting I | 3 | C |  |
| 4 FIN 300: Fundamentals of Finance | 3 | C |  |


| COM 259: Communication in Business and the Professions | 3 |  |
| :--- | :--- | :--- |
| ENG 302: Business Writing (L) | 3 |  |
| SCM 300: Global Supply Operations | 1 | C |
| WPC 301: Business Forum | C |  |

Minimum 2.00 GPA ASU Cumulative.
Term hours subtotal:

| Term 5 65-79 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ACC 440: External Reporting II |  | 3 | C |  |
| COM 230: Small Group Communication (SB) |  | 3 |  |  |
| LES 305: Legal, Ethical, and Regulatory Issues in Business |  | 3 | C |  |
| MKT 300: Marketing and Business Performance |  | 3 | C |  |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 80-94 Credit Hours |  | Hours | Minimum Grade | Notes |
| ACC 350: Internal Reporting |  | 3 | C |  |
| ACC 430: Taxes and Business Decisions |  | 3 | C |  |
| CIS 360: Business Database Concepts |  | 3 | C |  |
| MGT 300: Organization and Management Leadership |  | 3 | C |  |
| Historical Awareness (H) |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 95-107 Credit Hours |  | Hours | Minimum Grade | Notes |
| ACC 444: Enterprise Process Analysis and Design |  | 3 | C | - Accounting Scholars Program students see below for term 7 courses. |
| ECN 306: Survey of International Economics (SB \& G) |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Business Elective |  | 6 | C |  |
| Elective |  | 1 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 13 |  |  |
| Term 8 108-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| ACC 450: Principles of Auditing |  | 3 | C | - Accounting Scholars Program students see below for term 8 courses. |
| Upper Division Business Elective |  | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Elective |  | 1 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 13 |  |  |

## - Scholars Program Track

Application required. To be eligible, students must be W. P. Carey Accountancy majors who have completed a minimum of 72 credit hours of coursework and earned a minimum cumulative GPA of 3.50 and a minimum major (ACC) GPA of 3.50 . The 72 hours must include at least six hours of accounting courses at the 300 - level or higher taken in the School of Accountancy. Students in the Accounting Scholars Program http://wpcarey.asu.edu/accounting/undergraduate/scholars.cfm) complete the following courses in terms 7 and 8.

Term 7 Note: Courses are 3 credit hours each, with the exception of the Elective course, which is 2 credit hours.
Term 8 Note: Courses are 3 credit hours each, with the exception of ACC 484: Internship, which is 6 credit hours.

[^3]| ACC 450: Principles of Auditing | ACC 484: Internship |
| :--- | :--- |
| ECN 306: Survey of International Economics <br> (SB \& G) | ACC 444: Enterprise Process Analysis and <br> Design |
| Elective | ACC 494: Special Topics |

Literacy and Critical Inquiry (L)
Upper Division Humanities, Fine Arts and Design (HU)

## Notes:

- Total UD Hours: 51 Upper Division Hours Required for all W. P. Carey School of Business degree programs.
- Transfer UD Business Course Hours: 9 Hours Maximum.
- Community College Business Hours: 30 Hours Maximum.
- Major Proficiency Requirements

In addition to school of business and university requirements, Accountancy majors must receive grades of " C " (2.00) or higher in the required upper-division major and major support courses. If a student receives a grade below "C" (2.00) in any required upper-division major course, this course must be repeated before any other upper-division major course can be taken. If a second grade below " C " (2.00) is received in either an upper-division major course already taken or in a different upper-division major course, the student is no longer eligible to take additional upper-division major courses.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Business (Communication), BA

W. P. Carey School of Business

Campus:Polytechnic, Tempe, West
BABUSCBA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. CIS 105: Computer Applications and Information Technology (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Submission of a Current SAT Reasoning score or ACT score (we do not require the writing portion of these tests) by the end of the first semester in the program. <br> - See academic advisor for appropriate Student Success course requirement if not a first-time freshman. |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| WPC 101: Student Success in Business | 1 |  |  |
| PGS course (SB) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| 4 Milestone: Submission of a Current SAT Reasoning score or ACT score. |  |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |




```
ECN 335: South Asia and the World
Economy (SB & G)
ECN 360: Economic Development (SB & G)
ECN 365: Economics of Russia and Eastern
Europe (SB & G)
ECN 436: International Trade Theory (SB &
G)
ECN 438: International Monetary Economics
(SB & G)
FIN 456: International Financial Management
(G)
MGT 302: Principles of International
Business (G)
MGT 400: Cross-Cultural Management (C &
G)
MGT 350: Seminar in International Business
MKT 350: Seminar in International Business
MKT 360: Seminar in International Business
MGT 459: International Management (G)
MKT 425: Global Marketing Management
SCM 463: Global Supply Chain Management
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## Notes:

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- Total UD Hours: 51 Upper Division Hours Required for all W. P. Carey School of Business degree programs.
- Transfer UD Business Course Hours: 9 Hours Maximum.
- Community College Business Hours: 30 Hours Maximum.
```

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

```
General Studies designations listed on the major map are current for the 2011-2012 academic year.
```


## 2011-2012 Major Map Business (Global Politics), BA

W. P. Carey School of Business

Campus:Tempe
BABUSGPBA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. CIS 105: Computer Applications and Information Technology (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Submission of a Current SAT Reasoning score or ACT score (we do not require the writing portion of these tests) by the end of the first semester in the program. <br> - See academic advisor for appropriate Student Success course requirement if not a first-time freshman. |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| WPC 101: Student Success in Business | 1 |  |  |
| PGS course (SB) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| 4 Milestone: Submission of a Current SAT Reasoning score or ACT score. |  |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |


| Term 2 17-32 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA) | 3 | C |  |
| SOC course (SB) | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 33-47 Credit Hours Critical course signified by ${ }^{\text {\% }}$ | Hours | Minimum Grade | Notes |
| 4 ACC 231: Uses of Accounting Information I | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| 4 Global Politics Concentration course | 3 | C |  |
| COM 100: Introduction to Human Communication (SB) OR <br> COM 225: Public Speaking (L) OR <br> COM 230: Small Group Communication (SB) OR <br> COM 259: Communication in Business and the Professions | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 4. Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |



[^4]| Comparative Politics Global Politics Concentration | Global Issues and Problems Global Politics Concentration | World Politics Global Politics Concentration |
| :---: | :---: | :---: |
|  |  | OS 160: Global Politics (SB \& G) |

POS 150: Comparative Government (SB \&

G) POS 351: Democratization (SB \& G) $\quad$| POS 300: Contemp Global Controversies (SB |
| :--- |
| POS 350: Comparative Politics (SB \& G) |

Notes:

- Total UD Hours: 51 Upper Division Hours Required for all W. P. Carey School of Business degree programs.
- Transfer UD Business Course Hours: 9 Hours Maximum.
- Community College Business Hours: 30 Hours Maximum.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year

## 2011-2012 Major Map

## Business (Law), BA

W. P. Carey School of Business

Campus:Tempe
BABUSLBA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. CIS 105: Computer Applications and Information Technology (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Submission of a Current SAT Reasoning score or ACT score (we do not require the writing portion of these tests) by the end of the first semester in the program. <br> - See academic advisor for appropriate Student Success course requirement if not a first-time freshman. |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| PGS course (SB) | 3 |  |  |
| WPC 101: Student Success in Business | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| 4 Milestone: Submission of a Current SAT Reasoning score or ACT score. |  |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |
|  |  |  |  |


| Term 2-17-32 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA) | 3-4 | C |  |
| LIA 194: Intro to the BA in Business Law Concentration OR Elective | 1 |  |  |
| SOC course (SB) | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 1 ACC 231: Uses of Accounting Information I | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| LAW 105: The Structure and Methodology of the American Legal System OR LAW 194: U.S. Law \& Legal Analysis | 3 | C |  |
| COM 100: Introduction to Human Communication (SB) OR <br> COM 225: Public Speaking (L) OR <br> COM 230: Small Group Communication (SB) OR <br> COM 259: Communication in Business and the Professions | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 4. Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |



| Law Concentration Courses |  | International Business Course <br> LAW 394: Law of the DealECN 306: Survey of International Economics <br> (SB \& G) |
| :--- | :--- | :--- |

LAW 394: Corporate and SEC Law
LAW 394: Nonprofit Tax Law and Policy

## Notes:

- Total UD Hours: 51 Upper Division Hours Required for all W. P. Carey School of Business degree programs.
- Transfer UD Business Course Hours: 9 Hours Maximum.
- Community College Business Hours: 30 Hours Maximum.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Business (Public Service and Public Policy), BA

W. P. Carey School of Business

Campus:Tempe
BABUSPBA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CIS 105: Computer Applications and Information Technology (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - ASU Math Placement Exam score determines placement in Mathematics course |
| WPC 101: Student Success in Business | 1 |  |  |
| PGS course (SB) | 3 |  | - ASU 101 or College specific equivalent First Year Seminar |
| Humanities, Fine Arts and Design (HU) | 3 |  | required of all freshman |
| 4 Milestone: Submission of a Current SAT Reasoning score or ACT score. |  |  | - See academic advisor for appropriate Student Success course requirement if not a first-time freshman. |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |


| Term 2 17-32 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| SOC course (SB) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| (.) Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 4 ACC 231: Uses of Accounting Information I | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| 4 PAF 200: Public Service and Policy in the 21st Century | 3 | C |  |
| COM 100: Introduction to Human Communication (SB) OR <br> COM 225: Public Speaking (L) OR <br> COM 230: Small Group Communication (SB) OR <br> COM 259: Communication in Business and the Professions | 3 |  |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 1. Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 49-64 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 4 ACC 241: Uses of Accounting Information II | 3 | C |  |
| 4 ECN 221: Business Statistics (CS) | 3 | C |  |


| ENG 302: Business Writing (L) OR |  |  |
| :--- | :---: | :---: |
| ENG 301: Writing for the Professions (L) | 3 |  |
| WPC 301: Business Forum | 1 | C |
| Cultural Diversity in the U.S. (C) | 3 |  |
| Historical Awareness (H) | 3 |  |
| Milestone: The business skill courses are critical requirements that must be completed by <br> the end of Term Four: CIS 105, MAT 210, MAT 211, ECN 211, ECN 212, ACC 231, <br> ACC 241, ECN 221. |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |

Term hours subtotal:

| Term 5 65-79 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| MKT 300: Marketing and Business Performance |  | 3 | C |  |
| SCM 300: Global Supply Operations |  | 3 | C |  |
| PAF 300: Public Management and Administration |  | 3 | C |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 80-94 Credit Hours |  | Hours | Minimum Grade | Notes |
| MGT 300: Organization and Management Leadership |  | 3 | C |  |
| PAF 340: Contemporary Policy Challenges |  | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Complete 2 courses: General Education Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 95-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| FIN 300: Fundamentals of Finance |  | 3 | C |  |
| PAF 311: Leadership and Change (SB) |  | 3 | C |  |
| Upper Division PSPP Concentration Course |  | 3 | C |  |
| Upper Division International Business Elective AND Global Awareness (G) |  | 3 | C |  |
| Upper Division Elective |  | 2 |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| LES 305: Legal, Ethical, and Regulatory Issues in Business |  | 3 | C |  |
| Upper Division PSPP Concentration Course |  | 3 | C |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 12 |  |  |


| PSPP Concentration Courses |  | International Business Course |
| :--- | :--- | :--- | :--- |

> ECN 438: International Monetary Economics (SB \& G)
> FIN 456: International Financial Management (G)
> MGT 302: Principles of International
> Business (G)
> MGT 400: Cross-Cultural Management (C \& G)
> MGT 350: Seminar in International Business
> MKT 350: Seminar in International Business
> MKT 360: Seminar in International Business
> MGT 459: International Management (G)
> MKT 425: Global Marketing Management
> SCM 463: Global Supply Chain Management

Notes:

- Total UD Hours: 51 Upper Division Hours Required for all W. P. Carey School of Business degree programs.
- Transfer UD Business Course Hours: 9 Hours Maximum.
- Community College Business Hours: 30 Hours Maximum.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map Business (Sustainability), BA

W. P. Carey School of Business

Campus:Tempe, West
BABUSSBA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CIS 105: Computer Applications and Information Technology (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Submission of a Current SAT Reasoning score or ACT score (we do not require the writing portion of these tests) by the end of the first semester in the program. <br> - See academic advisor for appropriate Student Success course requirement if not a first-time freshman. |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| WPC 101: Student Success in Business | 1 |  |  |
| PGS course (SB) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| 1 Milestone: Submission of a Current SAT Reasoning score or ACT score. |  |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |
|  |  |  |  |


| Term 2 17-31 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| SOC course (SB) | 3 |  |  |
| Historical Awareness (H) | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| ACC 231: Uses of Accounting Information I | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| SOS 110: Sustainable World | 3 | C |  |
| COM 100: Introduction to Human Communication (SB) OR <br> COM 225: Public Speaking (L) OR <br> COM 230: Small Group Communication (SB) OR <br> COM 259: Communication in Business and the Professions | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Maintain 2.50 GPA in Major Courses. |  |  |  |
| Minimum 2.50 GPA in SOS 110, SOS 111 and PUP 190. |  |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |


| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| (1) ACC 241: Uses of Accounting Information II | 3 | C |  |
| 4 ECN 221: Business Statistics (CS) | 3 | C |  |
| SOS 111: Sustainable Cities ((HU or SB) \& G) OR PUP 190: Sustainable Cities ((HU or SB) \& G) | 3 | C |  |
| ENG 301: Writing for the Professions (L) OR <br> ENG 302: Business Writing (L) | 3 |  |  |
| WPC 301: Business Forum | 1 | C |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Milestone: The business skill courses are critical requirements that must be completed by the end of Term Four: CIS 105, MAT 210, MAT 211, ECN 211, ECN 212, ACC 231, ACC 241, ECN 221. |  |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Major Courses. |  |  |  |
| Minimum 2.50 GPA in SOS 110, SOS 111 and PUP 190. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 64-76 Credit Hours | Hours | Minimum Grade | Notes |
| MKT 300: Marketing and Business Performance | 3 | C |  |
| SCM 300: Global Supply Operations | 3 | C |  |
| SOS 325: The Economics of Sustainability | 3 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Maintain 2.50 GPA in Major Courses. |  |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 6 77-91 Credit Hours | Hours | Minimum Grade | Notes |
| MGT 300: Organization and Management Leadership | 3 | C |  |
| SOS Upper Division Elective | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Complete 2 courses: <br> Upper Division General Education Elective | 6 |  |  |
| Maintain 2.50 GPA in Major Courses. |  |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 92-106 Credit Hours | Hours | Minimum Grade | Notes |
| FIN 300: Fundamentals of Finance | 3 | C |  |
| SOS 394: Business and Sustainability OR SCM 394: Business and Sustainability | 3 | C |  |
| Upper Division International Business Elective AND Global Awareness (G) | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective | 6 |  |  |
| Maintain 2.50 GPA in Major Courses. |  |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 107-120 Credit Hours | Hours | Minimum Grade | Notes |
| LES 305: Legal, Ethical, and Regulatory Issues in Business | 3 | C |  |
| SCM 394: Business and Sustainability II | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Elective | 2 |  |  |
| Maintain 2.50 GPA in Major Courses. |  |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |


| International Business Course |
| :---: |
| ECN 306: Survey of International Economics (SB \& G) |
| ECN 331: Economics of the European Economic Union (SB \& G) |
| ECN 335: South Asia and the World Economy (SB \& G) |
| ECN 360: Economic Development (SB \& G) |
| ECN 365: Economics of Russia and Eastern Europe (SB \& G) |
| ECN 436: International Trade Theory (SB \& G) |
| ECN 438: International Monetary Economics (SB \& G) |
| FIN 456: International Financial Management (G) |
| MGT 302: Principles of International Business (G) |
| MGT 400: Cross-Cultural Management (C \& G) |
| MGT 350: Seminar in International Business |
| MKT 350: Seminar in International Business |
| MKT 360: Seminar in International Business |
| MGT 459: International Management (G) |
| MKT 425: Global Marketing Management |
| SCM 463: Global Supply Chain Management |

## Notes:

- Total UD Hours: 51 Upper Division Hours Required for all W. P. Carey School of Business degree programs.
- Transfer UD Business Course Hours: 9 Hours Maximum.
- Community College Business Hours: 30 Hours Maximum.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 1 UNIVERSITY

## 2011-2012 Major Map Business (Tourism), BA

W. P. Carey School of Business

Campus:Tempe
BABUSTBA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CIS 105: Computer Applications and Information Technology (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Submission of a Current SAT Reasoning score or ACT score (we do not require the writing portion of these tests) by the end of the first semester in the program. <br> - See academic advisor for appropriate Student Success course requirement if not a first-time freshman. |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| WPC 101: Student Success in Business | 1 |  |  |
| PGS course (SB) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| 1 Milestone: Submission of a Current SAT Reasoning score or ACT score. |  |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |
|  |  |  |  |


| Term 2 17-32 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| SOC course (SB) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| 4 Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 3 33-47 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 ACC 231: Uses of Accounting Information I | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| 4 TDM 205: Introduction to Travel and Tourism (G) | 3 | C |  |
| COM 100: Introduction to Human Communication (SB) OR <br> COM 225: Public Speaking (L) OR <br> COM 230: Small Group Communication (SB) OR <br> COM 259: Communication in Business and the Professions | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |


$\left.\begin{array}{l|l}\hline \begin{array}{l}\text { TDM 386: Convention Sales and } \\ \text { Management }\end{array} & \begin{array}{l}\text { ECN 335: South Asia and the World } \\ \text { Economy (SB \& G) }\end{array} \\ \hline \text { TDM 415: Tourism Transportation Systems }\end{array} \begin{array}{l}\text { ECN 360: Economic Development (SB \& G) }\end{array}\right\}$

## Notes:

- Total UD Hours: 51 Upper Division Hours Required for all W. P. Carey School of Business degree programs.
- Transfer UD Business Course Hours: 9 Hours Maximum.
- Community College Business Hours: 30 Hours Maximum.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Business (Urban Policy), BA

W. P. Carey School of Business

Campus:Tempe
BABUSUBA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. CIS 105: Computer Applications and Information Technology (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Submission of a Current SAT Reasoning score or ACT score (we do not require the writing portion of these tests) by the end of the first semester in the program. <br> - See academic advisor for appropriate Student Success course requirement if not a first-time freshman. |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| PGS course (SB) | 3 |  |  |
| WPC 101: Student Success in Business | 1 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 4 Milestone: Submission of a Current SAT Reasoning score or ACT score. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |


| Term 2 17-32 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA) | 3-4 | C |  |
| SOC course (SB) | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| 4 Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 3 33-47 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| 4 ACC 231: Uses of Accounting Information I | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| 4 URB 300: Urban and Metropolitan Studies | 3 | C |  |
| COM 100: Introduction to Human Communication (SB) OR <br> COM 225: Public Speaking (L) OR <br> COM 230: Small Group Communication (SB) OR <br> COM 259: Communication in Business and the Professions | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| 4 Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |


| (1. ACC 241: Uses of Accounting Information II | 3 | C |  |
| :---: | :---: | :---: | :---: |
| 1 ECN 221: Business Statistics (CS) | 3 | C |  |
| ENG 302: Business Writing (L) OR <br> ENG 301: Writing for the Professions (L) | 3 |  |  |
| WPC 301: Business Forum | 1 | C |  |
| Historical Awareness (H) | 3 |  |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Milestone: The business skill courses are critical requirements that must be completed by the end of Term Four: CIS 105, MAT 210, MAT 211, ECN 211, ECN 212, ACC 231, ACC 241, ECN 221. |  |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 64-76 Credit Hours | Hours | Minimum Grade | Notes |
| MKT 300: Marketing and Business Performance | 3 | C |  |
| SCM 300: Global Supply Operations | 3 | C |  |
| URB 305: Urban Governance | 3 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 6 77-91 Credit Hours | Hours | Minimum Grade | Notes |
| MGT 300: Organization and Management Leadership | 3 | C |  |
| PAF 340: Public Management and Policy | 3 | C |  |
| Complete 2 courses: <br> Upper Division General Education Elective | 6 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 92-106 Credit Hours | Hours | Minimum Grade | Notes |
| FIN 300: Fundamentals of Finance | 3 | C |  |
| PAF 460: Public Service Ethics | 3 | C |  |
| PAF 300 OR PAF 420 OR URB 220 OR URB 240 OR URB 301 OR URB 302 OR URB 410 | 3 | C |  |
| Upper Division International Business Elective AND Global Awareness (G) | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 107-120 Credit Hours | Hours | Minimum Grade | Notes |
| LES 305: Legal, Ethical, and Regulatory Issues in Business | 3 | C |  |
| PAF 300 OR PAF 420 OR URB 220 OR URB 240 OR URB 301 OR URB 302 OR URB 410 | 3 | C |  |
| Complete 2 courses: Upper Division Elective | 6 |  |  |
| Elective | 2 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |

[^5]```
ECN 335: South Asia and the World
Economy (SB & G)
ECN 360: Economic Development (SB & G)
ECN 365: Economics of Russia and Eastern
Europe (SB & G)
ECN 436: International Trade Theory (SB &
G)
ECN 438: International Monetary Economics
(SB & G)
FIN 456: International Financial Management
(G)
MGT 302: Principles of International
Business (G)
MGT 400: Cross-Cultural Management (C &
G)
MGT 350: Seminar in International Business
MKT 350: Seminar in International Business
MKT 360: Seminar in International Business
MGT 459: International Management (G)
MKT 425: Global Marketing Management
SCM 463: Global Supply Chain Management
```

Notes:

- Total UD Hours: 51 Upper Division Hours Required for all W. P. Carey School of Business degree programs.
    - Transfer UD Business Course Hours: 9 Hours Maximum.
    - Community College Business Hours: 30 Hours Maximum.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

Major Map: Business Exploratory -<br>Bachelor of Science (B.S.)

W. P. Carey School of Business | Catalog Year: 2011-2012

|  |  |  | Competed Transfer Pathway: |  | Completed General Education: $\square$ AGEC $\square$ IGETC/CSUGE $\square$ None |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title (courses in bold/shading are critical) | Hrs. | Upper Division | Transfer Course/Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE: 0-15 CREDIT HOURS |  |  |  |  |  |
| WPC 101: Student Success in Business | 1 | $\square$ |  |  | - See academic advisor for appropriate Student Success course requirement if not first-time freshmen. <br> - An SAT, ACT, or Accuplacer, or TOEFL score determines placement in first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - Maintain 2.0 ASU cumulative GPA. |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | $\square$ |  | Grade of C |  |
| CIS 105: Computer Applications and Information Technology (CS) | 3 | $\square$ |  | Grade of C |  |
| ENG 101 or 102: First-Year Composition OR <br> ENG 107 or 108: English for Foreign Students OR <br> ENG 105: Advanced First-Year Composition | 3 | $\square$ |  | Grade of C |  |
| Humanities, Fine Arts and Design (HU) | 3 | $\square$ |  |  |  |
| PGS course (SB): | 3 | $\square$ |  |  |  |
| TERM TWO: 16-30 CREDIT HOURS |  |  |  |  |  |
| ACC 231: Uses of Accounting Information I | 3 | $\square$ |  | Grade of C | - Maintain 2.0 ASU cumulative GPA. <br> - Selection of a major by the end of Term Two. |
| Complete 1 course from: <br> ECN 211: Macroeconomic Principles (SB) <br> ECN 212: Microeconomic Principles (SB) | 3 | $\square$ |  | Grade of C |  |
| MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA) | 3-4 | $\square$ |  | Grade of C |  |
| ENG 101 or 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or 108: English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| SOC course (SB) | 3 | $\square$ |  |  |  |
| TERM THREE: 31-45 CREDIT HOURS |  |  |  |  |  |
| ACC 241: Uses of Accounting Information II | 3 | $\square$ |  | Grade of C | - First-Year Composition completed by end of the third term. <br> - The business skill courses are critical requirements that must be completed by the end of Term Three: CIS 105, MAT 210, MAT 211, ECN 211, ACC 231, ECN 212, ACC 241, ECN 221.Accountancy majors must take COM 225 (recommended) or COM 259 AND COM 230. <br> - Management majors: COM 225 is recommended. <br> - Maintain 2.0 ASU cumulative GPA. |
| Complete remaining course from: <br> ECN 211: Macroeconomic Principles (SB) <br> ECN 212: Microeconomic Principles (SB) | 3 | $\square$ |  | Grade of C |  |
| ECN 221: Business Statistics (CS) | 3 | $\square$ |  | Grade of C |  |
| COM 100: Introduction to Human Communication (SB) OR <br> COM 225: Public Speaking (L) OR <br> COM 230: Small Group Communication (SB) OR <br> COM 259: Communication in Business and the Professions | 3 | $\square$ |  |  |  |
| Natural Science Quantitative (SQ) | 4 | $\square$ |  |  |  |
| TERM FOUR - TERM EIGHT: 46-120 CREDIT HOURS |  |  |  |  |  |
| Students follow major map for selected W. P. Carey School of Busi |  |  |  |  |  |

## Graduation Requirements Summary:

| Total Hours <br> $(120)$ | Total Hrs at <br> ASU (30) | Hrs Resident Credit for <br> Academic Recognition <br> $(56)$ | Transfer <br> UD Bus. <br> Hrs (9 max $)$ | Overall GPA <br> $(2.000$ Min.) | BUS GPA <br> $(2.000$ Min. $)$ | Major GPA <br> $(2.000$ Min. $)$ | C Min. <br> Req. | Total UD Hrs <br> $(51)$ | Total Comm. <br> College Hrs. <br> $(64$ Max) | Total Comm. <br> Coll. Bus. Hrs. <br> $(30$ Max $)$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)

Humanities, Fine Arts, and Design (HU)
Social and Behavioral Sciences (SB)

- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements:
- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition


## Additional Notes:

The critical requirements listed are the minimum requirements for any degree program in the W. P. Carey School of Business. Some degree programs have higher minimum requirements. Business Exploratory students should check the critical requirements and critical courses for any degree program they might be interested in pursuing.

Prior to the fourth semester of undergraduate study, Bachelor of Science business exploratory students must choose a degree program from the following W. P. Carey business degrees:

- Accounting
- Computer Information Systems
- Economics
- Finance
- Management
- Marketing
- Supply Chain Management

After choosing a business degree program, students must meet the critical requirements for that program.

## 2011-2012 Major Map

## Computer Information Systems, BS

W. P. Carey School of Business

Campus:Tempe
BACISBS

| Term 1 0-16 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CIS 105: Computer Applications and Information Technology (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| WPC 101: Student Success in Business | 1 |  |  |
| PGS course (SB) | 3 |  | - ASU 101 or College specific equivalent First Year Seminar |
| Humanities, Fine Arts and Design (HU) | 3 |  | required of all freshman |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  | - Students. |
| Term hours subtotal: | 16-17 |  | appropriate Student Success course requirement if not a first-time freshman. |


| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 ACC 231: Uses of Accounting Information I | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| SOC course (SB) | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 ACC 241: Uses of Accounting Information II | 3 | C | - The business skill courses are critical requirements that must be completed by the end of Terr Three: CIS 105, MAT 210, ACC 232, ECN 211, MAT 211, ACC 242, ECN 212, ECN 221. |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| 4 ECN 221: Business Statistics (CS) | 3 | C |  |
| COM 100: Introduction to Human Communication (SB) OR <br> COM 225: Public Speaking (L) OR <br> COM 230: Small Group Communication (SB) OR <br> COM 259: Communication in Business and the Professions | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Milestone: The business skill courses are critical requirements that must be completed by the end of Term Three: CIS 105, MAT 210, ACC 231, ECN 211, MAT 211, ACC 241, ECN 212, ECN 221. |  |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 48-62 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |


| 4. SCM 300: Global Supply Operations |  | 3 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| WPC 301: Business Forum |  | 1 | C |  |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Historical Awareness (H) |  | 3 |  |  |
| Elective |  | 2 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 5 63-77 Credit Hours |  | Hours | Minimum Grade | Notes |
| ACC 444: Enterprise Process Analysis and Design |  | 3 | C |  |
| CIS 340: Business Information System Development I |  | 3 | C |  |
| ENG 302: Business Writing (L) |  | 3 |  |  |
| FIN 300: Fundamentals of Finance |  | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 78-93 Credit Hours |  | Hours | Minimum Grade | Notes |
| CIS 345: Business Information System Development II |  | 3 | C |  |
| CIS 360: Business Database Concepts |  | 3 | C |  |
| LES 305: Legal, Ethical, and Regulatory Issues in Business |  | 3 | C |  |
| MKT 300: Marketing and Business Performance |  | 3 | C |  |
| Natural Science - Quantitative (SQ) |  | 4 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 7 94-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| CIS 425: Electronic Commerce Strategy |  | 3 | C |  |
| CIS 430: Networks and Distributed Systems |  | 3 | C |  |
| MGT 300: Organization and Management Leadership |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division General Education Elective |  | 6 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| CIS 440: Systems Design and Electronic Commerce (L) |  | 3 | C |  |
| Upper Division International Business Elective AND Global Awareness (G) |  | 3 | C |  |
| General Education Elective |  | 3 |  |  |
| Elective |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 12 |  |  |

[^6]```
ECN 436: International Trade Theory (SB &
G)
ECN 438: International Monetary Economics
(SB & G)
FIN 456: International Financial Management
(G)
MGT 302: Principles of International
Business (G)
MGT 400: Cross-Cultural Management (C &
G)
MGT 350: Seminar in International Business
MKT 350: Seminar in International Business
MKT 360: Seminar in International Business
MGT 459: International Management (G)
MKT 425: Global Marketing Management
SCM 463: Global Supply Chain Management
```

Notes:

- Total UD Hours: 51 Upper Division Hours Required for all W. P. Carey School of Business degree programs.
- Transfer UD Business Course Hours: 9 Hours Maximum.
- Community College Business Hours: 30 Hours Maximum.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 4 UNIVERSITY

## 2011-2012 Major Map Economics, BS

W. P. Carey School of Business Campus:Tempe BAECNBS

| Term 1 0-16 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CIS 105: Computer Applications and Information Technology (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| WPC 101: Student Success in Business | 1 |  |  |
| PGS course (SB) | 3 |  | - ASU 101 or College specific equivalent First Year Seminar |
| Humanities, Fine Arts and Design (HU) | 3 |  | required of all freshman |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  | - Students. |
| Term hours subtotal: | 16-17 |  | appropriate Student Success course requirement if not a first-time freshman. |


| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ACC 231: Uses of Accounting Information I OR ACC 232: Financial Accounting I | 3 | C | - Students intending to do a concurrent major in accounting or finance should enroll in ACC 232. |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| SOC course (SB) | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| ACC 241: Uses of Accounting Information II OR ACC 242: Managerial Accounting I | 3 | C | - The business skill courses are critical requirements that must be completed by the end of Term Three: CIS 105, MAT 210, ACC 232, ECN 211, MAT 211, ACC 242, ECN 212, ECN 221. <br> - Students intending to do a concurrent major in accounting or finance should enroll in ACC 242. |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| 4 ECN 221: Business Statistics (CS) | 3 | C |  |
| COM 100: Introduction to Human Communication (SB) OR <br> COM 225: Public Speaking (L) OR <br> COM 230: Small Group Communication (SB) OR <br> COM 259: Communication in Business and the Professions | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Milestone: The business skill courses are critical requirements that must be completed by the end of Term Three: CIS 105, MAT 210, ACC 231, ECN 211, MAT 211, ACC 241, ECN 212, ECN 221. |  |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 1. Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {+ }}$ | Hours | Minimum Grade | Notes |


| ECN 3** Elective AND <br> Upper Division Social and Behavioral Sciences (SB) OR ECN 4** Elective AND Upper Division Social and Behavioral Sciences (SB) |  | 3 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| 4 SCM 300: Global Supply Operations |  | 3 | C |  |
| ENG 302: Business Writing (L) |  | 3 |  |  |
| WPC 301: Business Forum |  | 1 | C |  |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Historical Awareness (H) |  | 3 |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 5 64-79 Credit Hours |  | Hours | Minimum Grade | Notes |
| ECN 312: Intermediate Microeconomic Theory (SB) |  | 3 | C |  |
| FIN 300: Fundamentals of Finance |  | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) |  | 4 |  |  |
| Upper Division Elective |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 6 80-94 Credit Hours |  | Hours | Minimum Grade | Notes |
| ECN 313: Intermediate Macroeconomic Theory (SB) |  | 3 | C | - Minimum of two 300/400 level economic courses completed |
| ECN 4** Elective |  | 3 | C |  |
| MGT 300: Organization and Management Leadership |  | 3 | C |  |
| MKT 300: Marketing and Business Performance |  | 3 | C |  |
| General Education Elective |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
| Complete ECN 312, ECN 313 course(s). |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 95-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| ECN 306: Survey of International Economics (SB \& G) OR <br> ECN 360: Economic Development (SB \& G) OR <br> ECN 436: International Trade Theory (SB \& G) OR <br> ECN 438: International Monetary Economics (SB \& G) |  | 3 | C |  |
| ECN 410: Applied Business Forecasting OR ECN 425: Introduction to Econometrics |  | 3 | C |  |
| ECN 4** Elective |  | 3 | C |  |
| LES 305: Legal, Ethical, and Regulatory Issues in Business |  | 3 | C |  |
| Upper Division Elective |  | 2 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| ECN 475: Capstone in Economics (L) |  | 3 | C | - Complete all major courses and international business requirements |
| Complete 2 courses: General Education Elective |  | 6 |  |  |
| Elective |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 12 |  |  |

## Notes:

- Transfer UD Business Course Hours: 9 Hours Maximum.
- Community College Business Hours: 30 Hours Maximum.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum Cumulative GPA: 2.00 minimum Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4 UNIVERSITY

## 2011-2012 Major Map <br> Finance, BS

W. P. Carey School of Business Campus:Tempe BAFINBS

| Term 1 0-16 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CIS 105: Computer Applications and Information Technology (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| WPC 101: Student Success in Business | 1 |  |  |
| PGS course (SB) | 3 |  | - ASU 101 or College specific equivalent First Year Seminar |
| Humanities, Fine Arts and Design (HU) | 3 |  | required of all freshman |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  | - Students. |
| Term hours subtotal: | 16-17 |  | appropriate Student Success course requirement if not a first-time freshman. |


| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 ACC 232: Financial Accounting I | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA) | 3-4 | C |  |
| SOC course (SB) | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by ${ }^{\text {! }}$ | Hours | Minimum Grade | Notes |
| 1 ACC 242: Managerial Accounting I | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| 4 ECN 221: Business Statistics (CS) | 3 | C |  |
| COM 100: Introduction to Human Communication (SB) OR <br> COM 225: Public Speaking (L) OR <br> COM 230: Small Group Communication (SB) OR <br> COM 259: Communication in Business and the Professions | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Milestone: The business skill courses are critical requirements that must be completed by the end of Term Three: CIS 105, MAT 210, ACC 231, ECN 211, MAT 211, ACC 241, ECN 212, ECN 221. |  |  |  |
| 4 Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 1 FIN 302: Managerial Finance | 3 | C |  |


| SCM 300: Global Supply Operations |  | 3 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| ENG 302: Business Writing (L) |  | 3 |  |  |
| WPC 301: Business Forum |  | 1 | C |  |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Historical Awareness (H) |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 5 64-76 Credit Hours |  | Hours | Minimum Grade | Notes |
| ACC 340: External Reporting I |  | 3 | C |  |
| FIN 361: Advanced Managerial Finance |  | 3 | C |  |
| MKT 300: Marketing and Business Performance |  | 3 | C |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) |  | 4 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 13 |  |  |
| Term 6 77-91 Credit Hours |  | Hours | Minimum Grade | Notes |
| FIN 331: Financial Markets and Institutions |  | 3 | C |  |
| MGT 300: Organization and Management Leadership |  | 3 | C |  |
| Complete 2 courses: General Education Elective |  | 6 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 92-106 Credit Hours |  | Hours | Minimum Grade | Notes |
| CIS 394: Advanced Excel in Business OR Upper Division Elective |  | 3 |  |  |
| FIN 421: Security Analysis and Portfolio Management |  | 3 | C |  |
| FIN Upper Division Elective |  | 3 | C |  |
| LES 305: Legal, Ethical, and Regulatory Issues in Business |  | 3 | C |  |
| Upper Division International Business Elective AND Global Awareness (G) |  | 3 | C |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 107-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| FIN 461: Financial Cases and Modeling (L) |  | 3 | C |  |
| FIN 484: Internship OR Upper Division Elective |  | 3 |  |  |
| General Education Elective |  | 2 |  |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 14 |  |  |
| International Business Course |  |  |  |  |
| ECN 306: Survey of International Economics (SB \& G) |  |  |  |  |
| ECN 331: Economics of the European Economic Union (SB \& G) |  |  |  |  |
| ECN 335: South Asia and the World Economy (SB \& G) |  |  |  |  |
| ECN 360: Economic Development (SB \& G) |  |  |  |  |

ECN 365: Economics of Russia and Eastern
Europe (SB \& G)
ECN 436: International Trade Theory (SB \&
G)
ECN 438: International Monetary Economics
(SB \& G)
FIN 456: International Financial Management
(G)
MGT 302: Principles of International
Business (G)
MGT 400: Cross-Cultural Management (C \&
G)
MGT 350: Seminar in International Business
MKT 350: Seminar in International Business
MKT 360: Seminar in International Business
MGT 459: International Management (G)
MKT 425: Global Marketing Management
SCM 463: Global Supply Chain Management

## Notes:

- Total UD Hours: 51 Upper Division Hours Required for all W. P. Carey School of Business degree programs.
- Transfer UD Business Course Hours: 9 Hours Maximum.
- Community College Business Hours: 30 Hours Maximum.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## Hrs Resident Credit for

Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Management, BS

W. P. Carey School of Business Campus:Polytechnic, Tempe, West BAMGTBS

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CIS 105: Computer Applications and Information Technology (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - See academic advisor for appropriate Student Success course requirement if not a first-time freshman. |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| WPC 101: Student Success in Business | 1 |  |  |
| PGS course (SB) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| ¢. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |


| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| :---: | :---: | :---: | :---: |
| 1 ACC 231: Uses of Accounting Information I | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| SOC course (SB) | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| 4. ACC 241: Uses of Accounting Information II | 3 | C | - The business skill courses are critical requirements that must be completed by the end of Term Three: CIS 105, MAT 210, ACC 232, ECN 211, MAT 211, ACC 242, ECN 212, ECN 221. |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| 4 ECN 221: Business Statistics (CS) | 3 | C |  |
| COM 100: Introduction to Human Communication (SB) OR <br> COM 225: Public Speaking (L) OR <br> COM 230: Small Group Communication (SB) OR <br> COM 259: Communication in Business and the Professions | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Milestone: The business skill courses are critical requirements that must be completed by the end of Term Three: CIS 105, MAT 210, ACC 231, ECN 211, MAT 211, ACC 241, ECN 212, ECN 221. |  |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| 4. ENG 302: Business Writing (L) | 3 | C |  |


| 4. MGT 300: Organization and Management Leadership |  | 3 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 MGT 320: Organizational Behavior |  | 3 | C |  |
| MKT 300: Marketing and Business Performance |  | 3 | C |  |
| WPC 301: Business Forum |  | 1 | C |  |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 5 64-79 Credit Hours |  | Hours | Minimum Grade | Notes |
| FIN 300: Fundamentals of Finance |  | 3 | C |  |
| MGT 302: Principles of International Business (G) OR Upper Division International Business Elective |  | 3 | C |  |
| SCM 300: Global Supply Operations |  | 3 | C |  |
| Historical Awareness (H) |  | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) |  | 4 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 6 80-94 Credit Hours |  | Hours | Minimum Grade | Notes |
| MGT 411: Leading Organizations |  | 3 | C |  |
| MGT Upper Division Elective |  | 3 | C |  |
| Complete 2 courses: General Education Elective |  | 6 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 95-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| LES 305: Legal, Ethical, and Regulatory Issues in Business |  | 3 | C |  |
| MGT 4** Elective |  | 3 | C |  |
| MGT Upper Division Elective |  | 3 | C |  |
| General Education Elective |  | 2 |  |  |
| Upper Division Elective |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| MGT 460: Strategic Management (L) |  | 3 | C |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
| Elective |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 12 |  |  |

## Notes:

- Total UD Hours: 51 Upper Division Hours Required for all W. P. Carey School of Business degree programs.
- Transfer UD Business Course Hours: 9 Hours Maximum.
- Community College Business Hours: 30 Hours Maximum.

Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Management (Entrepreneurship), BS

W. P. Carey School of Business

Campus:Tempe
BAMGTEBS

| Term 1 0-16 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CIS 105: Computer Applications and Information Technology (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| WPC 101: Student Success in Business | 1 |  |  |
| PGS course (SB) | 3 |  | - ASU 101 or College specific equivalent First Year Seminar |
| Humanities, Fine Arts and Design (HU) | 3 |  | required of all freshman |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  | - Students. |
| Term hours subtotal: | 16-17 |  | appropriate Student Success course requirment if not a first-time freshman. |


| Term 2 17-31 Credit Hours Critical course signified by 9 | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: |
| 1 ACC 231: Uses of Accounting Information I | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| SOC course (SB) | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 4 ACC 241: Uses of Accounting Information II | 3 | C | - The business skill courses are critical requirements that must be completed by the end of Terr Three: CIS 105, MAT 210, ACC 232, ECN 211, MAT 211, ACC 242, ECN 212, ECN 221. |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| 4 ECN 221: Business Statistics (CS) | 3 | C |  |
| COM 100: Introduction to Human Communication (SB) OR <br> COM 225: Public Speaking (L) OR <br> COM 230: Small Group Communication (SB) OR <br> COM 259: Communication in Business and the Professions | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Milestone: The business skill courses are critical requirements that must be completed by the end of Term Three: CIS 105, MAT 210, ACC 231, ECN 211, MAT 211, ACC 241, ECN 212, ECN 221. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| 4. MGT 300: Organization and Management Leadership | 3 | C |  |


| 4. MGT 320: Organizational Behavior |  | 3 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 ENG 302: Business Writing (L) |  | 3 | C |  |
| MKT 300: Marketing and Business Performance |  | 3 | C |  |
| WPC 301: Business Forum |  | 1 | C |  |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 5 64-79 Credit Hours |  | Hours | Minimum Grade | Notes |
| FIN 300: Fundamentals of Finance |  | 3 | C |  |
| MGT 302: Principles of International Business (G) OR Upper Division International Business Elective |  | 3 | C |  |
| MGT 394: Intro to Entrepreneurship |  | 3 | C |  |
| SCM 300: Global Supply Operations |  | 3 | C |  |
| Natural Science - Quantitative (SQ) OR Natural Science - General (SG) |  | 4 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 6 80-94 Credit Hours |  | Hours | Minimum Grade | Notes |
| LES 305: Legal, Ethical, and Regulatory Issues in Business |  | 3 | C |  |
| MGT 440: Entrepreneurship |  | 3 | C |  |
| General Education Elective |  | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 95-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> Upper Division Entrepreneurship Elective |  | 6 | C |  |
| General Education Elective |  | 3 |  |  |
| Historical Awareness (H) |  | 3 |  |  |
| Elective |  | 2 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| MGT 445: Business Plan Development |  | 3 | C |  |
| Upper Division Entrepreneurship Elective |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 12 |  |  |

-     - A maximum of 3 hours of internship credit can be applied to the Upper Division Entrepreneurship Elective requirement.

[^7]MGT 464: Collaborative Design
Development I (L)
MGT 465: Collaborative Design
Development II (L)
MGT 484: Internship
MGT 294: Auto Entrepreneurship
Opportunities, Automotive Entrepreneurship
MGT 494: Accounting and Finance in the
Auto Industry, Customer Service in the Auto
Industry, Human Resources and the Auto
Industry, Negotiations, Sustainable
Dealership Management
WPC 394: Creativity and Innovation

## Notes:

- Total UD Hours: 51 Upper Division Hours Required for all W. P. Carey School of Business degree programs.
- Transfer UD Business Course Hours: 9 Hours Maximum.
- Community College Business Hours: 30 Hours Maximum.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Marketing, BS

W. P. Carey School of Business

Campus:Tempe
BAMKTBS

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CIS 105: Computer Applications and Information Technology (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - See academic advisor for appropriate Student Success course requirement if not a first-time freshman. |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| WPC 101: Student Success in Business | 1 |  |  |
| PGS course (SB) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| ¢. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |


| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. ACC 231: Uses of Accounting Information I | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| SOC course (SB) | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 4 ACC 241: Uses of Accounting Information II | 3 | C | - The business skill courses are critical requirements that must be completed by the end of Terr Three: CIS 105, MAT 210, ACC 232, ECN 211, MAT 211, ACC 242, ECN 212, ECN 221. |
| 4 ECN 221: Business Statistics (CS) | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| COM 100: Introduction to Human Communication (SB) OR <br> COM 225: Public Speaking (L) OR <br> COM 230: Small Group Communication (SB) OR <br> COM 259: Communication in Business and the Professions | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Milestone: The business skill courses are critical requirements that must be completed by the end of Term Three: CIS 105, MAT 210, ACC 231, ECN 211, MAT 211, ACC 241, ECN 212, ECN 221. |  |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 1. ENG 302: Business Writing (L) | 3 | C |  |



```
ECN 365: Economics of Russia and Eastern
Europe (SB & G)
ECN 436: International Trade Theory (SB &
G)
ECN 438: International Monetary Economics
(SB & G)
FIN 456: International Financial Management
(G)
MGT 302: Principles of International
Business (G)
MGT 400: Cross-Cultural Management (C & 
G)
MGT 350: Seminar in International Business
MKT 350: Seminar in International Business
MKT 360: Seminar in International Business
MGT 459: International Management (G)
MKT 425: Global Marketing Management
SCM 463: Global Supply Chain Management
```


## Notes:

- Total UD Hours: 51 Upper Division Hours Required for all W. P. Carey School of Business degree programs.
- Transfer UD Business Course Hours: 9 Hours Maximum.
- Community College Business Hours: 30 Hours Maximum.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Supply Chain Management, BS

W. P. Carey School of Business

Campus:Tempe
BASCMBS

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CIS 105: Computer Applications and Information Technology (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - See academic advisor for appropriate Student Success course requirement if not a first-time freshman. |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| WPC 101: Student Success in Business | 1 |  |  |
| PGS course (SB) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| ¢. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |


| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 ACC 231: Uses of Accounting Information I | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| SOC course (SB) | 3 |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 4 ACC 241: Uses of Accounting Information II | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| 4 ECN 221: Business Statistics (CS) | 3 | C |  |
| COM 100: Introduction to Human Communication (SB) OR <br> COM 225: Public Speaking (L) OR <br> COM 230: Small Group Communication (SB) OR <br> COM 259: Communication in Business and the Professions | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Milestone: The business skill courses are critical requirements that must be completed by the end of Term Three: CIS 105, MAT 210, ACC 231, ECN 211, MAT 211, ACC 241, ECN 212, ECN 221. |  |  |  |
| 4 Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {! }}$ | Hours | Minimum Grade | Notes |
| 4 MGT 300: Organization and Management Leadership | 3 | C |  |


| 4. SCM 300: Global Supply Operations | 3 | C |  |
| :---: | :---: | :---: | :---: |
| ENG 302: Business Writing (L) | 3 |  |  |
| WPC 301: Business Forum | 1 | C |  |
| Historical Awareness (H) | 3 |  |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 64-79 Credit Hours | Hours | Minimum Grade | Notes |
| MKT 300: Marketing and Business Performance | 3 | C |  |
| SCM 345: Logistics Management | 3 | C |  |
| Upper Division International Business Elective AND Global Awareness (G) | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) | 3 |  |  |
| $\begin{aligned} & \text { Natural Science - General (SG) OR } \\ & \text { Natural Science - Quantitative (SQ) } \end{aligned}$ | 4 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 80-94 Credit Hours | Hours | Minimum Grade | Notes |
| FIN 300: Fundamentals of Finance | 3 | C |  |
| LES 305: Legal, Ethical, and Regulatory Issues in Business | 3 | C |  |
| SCM 355: Supply Management (L) | 3 | C |  |
| Upper Division General Education Elective | 3 |  |  |
| General Education Elective | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 95-108 Credit Hours | Hours | Minimum Grade | Notes |
| SCM 432: Planning and Control Systems for Supply Chain Management | 3 | C |  |
| SCM 455: Research and Negotiation | 3 | C |  |
| General Education Elective | 2 |  |  |
| Upper Division Elective | 3 |  |  |
| Elective | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| SCM 440: Quality Management/Measurement | 3 | C |  |
| SCM 479: Supply Chain Strategy | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Elective | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 12 |  |  |
| International Business Course |  |  |  |
| ECN 306: Survey of International Economics $(\mathrm{SB} \& \mathrm{G})$ |  |  |  |
| ECN 331: Economics of the European Economic Union (SB \& G) |  |  |  |
| ECN 335: South Asia and the World Economy (SB \& G) |  |  |  |
| ECN 360: Economic Development (SB \& G) |  |  |  |

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ECN 365: Economics of Russia and Eastern
Europe (SB & G)
ECN 436: International Trade Theory (SB &
G)
ECN 438: International Monetary Economics
(SB & G)
FIN 456: International Financial Management
(G)
MGT 302: Principles of International
Business (G)
MGT 400: Cross-Cultural Management (C &
G)
MGT 350: Seminar in International Business
MKT 350: Seminar in International Business
MKT 360: Seminar in International Business
MGT 459: International Management (G)
MKT 425: Global Marketing Management
SCM 463: Global Supply Chain Management
```


## Notes:

- Total UD Hours: 51 Upper Division Hours Required for all W. P. Carey School of Business degree programs.
- Transfer UD Business Course Hours: 9 Hours Maximum.
- Community College Business Hours: 30 Hours Maximum.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Architectural Studies, BSD <br> Herberger Institute for Design and the Arts <br> Campus:Tempe <br> ARSTDBSD



Milestone: Evaluation required.
Maintain 2.00 GPA in Critical Tracking Courses.
Minimum 2.75 GPA ASU Cumulative.
Term hours subtotal
16

| Term 3 33-46 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4. ALA 225: Design Fundamentals III | 4 | C |  |
| 4 ALA 235: Introduction to Computer Modeling (CS) | 3 | C |  |
| APH 313: History of Architecture I ((L or HU) \& G \& H) | 3 |  |  |
| PHY 101: Introduction to Physics (SQ) | 4 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 47-60 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |

ALA 226: Design Fundamentals IV $\quad 4$

| 9 ATE 294: Building Systems | 3 |
| :--- | :--- |
| APH 314: History of Architecture II ((L or HU) \& G \& H) | 3 |


| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| :---: | :---: | :---: | :---: |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 5 61-74 Credit Hours | Hours | Minimum Grade | Notes |
| ADE 321: Architectural Studio I | 5 | C |  |
| APH 336: 20th-Century Architecture I (HU) | 3 | C |  |
| ATE 361: Building Structures I | 3 | C |  |
| Elective | 3 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 6 75-89 Credit Hours | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| ADE 322: Architectural Studio II | 5 | C |  |
| APH 337: 20th-Century Architecture II (HU) | 3 | C |  |
| ATE 362: Building Structures II | 3 | C |  |
| Elective | 4 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 90-106 Credit Hours | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| ADE 421: Architectural Studio III | 5 | C |  |
| APH 421: First Concepts: What is... The Writing, Philosophy, and Culture of Architecture (L or HU) | 3 | C |  |
| ATE 451: Building Systems I | 3 | C |  |
| Elective | 6 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 8 107-120 Credit Hours | Hours | Minimum Grade | Notes |
| ADE 422: Architectural Studio IV | 5 | C |  |
| ATE 452: Building Systems II | 3 | C |  |
| Complete 2 courses: Elective | 6 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |

## Notes:

- Most studio and some lecture courses are sequential, must be taken in, and may be offered only during the semester noted.

The Architecture program takes six years to complete four years of undergraduate study leading to a Bachelor of Science in Design and two years graduate study leading to an accredited Master of Architecture, the professional degree.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Art (Art Education), BFA

Herberger Institute for Design and the Arts
Campus:Tempe
FAARTEBFA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| (1) ASU 101: The ASU Experience | 1 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| Complete 2 courses: <br> ART 111: Drawing I OR ART 112: 2-D Design OR ART 113: Color OR ART 115: 3-D Design | 6 | C |  |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |
|  | 16 |  |  |
| Term 2 17-31 Credit Hours Critical course signified by 9 | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| Complete 2 courses: <br> ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 113: Color OR <br> ART 115: 3-D Design | 6 | C | - Teachers College requirement: EDT 180 required for students pursuing K-12 certification. |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) OR EDT 180: Computer Literacy (CS) | 3 |  |  |
| Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |
|  | 15 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| (1) ARE 250: Teaching Inquiry in Art | 3 | B- | - Minimum grade of B- or better in ARE 250 for portfolio review. |
| -1. 2D Art Course | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  | - Teachers College requirement: GCU 194 recommended for students pursuing K-12 certification. Students who take this course will need to complete a G (global awareness) course and can do so as part of their art history non-Western requirement. <br> - Teachers College requirement: BLE 220 required for students pursuing K-12 certification. <br> - Teachers College requirement: Students must complete a Natural Science course (SQ or SG) by end of term 4. <br> - Teachers College requirement: complete the Intent to Progress |
| Social and Behavioral Sciences (SB) AND <br> Global Awareness (G) OR <br> GCU 194: U.S. and Arizona for Aspiring Elementary Educators | 3 |  |  |
| 2D or 3D Art Course OR <br> BLE 220: Foundations of Structured English Immersion | 3 |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| 4 Complete ARS 101, ARS 102 course(s). |  |  |  |
|  | 16 |  |  |

Form (meet with Teachers College advisor to complete this form).

- Teachers College requirement: apply for DPS fingerprint clearance card.

| Term 4 48-63 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. 3D Art Course | 3 | C | - SPE 222 required for students pursuing K-12 certification. <br> - Students must complete an Art Education Proficiency Form with an advisor and have an art education |
| ARE 440: Interdisciplinary Art Education OR Upper Division Elective | 3 |  |  |
| 2D or 3D Art Course | 3 | C |  |
| Social and Behavioral Sciences (SB) AND <br> Cultural Diversity in the U.S. (C) OR <br> SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 |  | Art Education Proficiency courses: ARA, ARE, ARS and ART prefix; cannot be ARA 311, ARS 100 or |
| Natural Science - Quantitative (SQ) AND Natural Science - General (SG) | 4 |  | - Students in the School of Art must successfully complete a portfolio review for entrance into upper division coursework in the major. This typically takes place during term four. For more information, see: art.asu.edu/students/current/undergrad/applySOA.php |
| 4. Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |
| - Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| 4. Milestone: Completion of successful portfolio review |  |  | - Teachers College requirement: Attend Teachers College enrollment workshop if you intend to pursue |
| Milestone: Complete Art Education Proficiency Form with advisor and have art education faculty mentor approve proficiency coursework. |  |  | K-12 certification. <br> - Teachers College requirement: Submit copy of DPS |
| Term hours subtotal: | 16 |  | fingerprint clearance card to Teachers College (Farmer 120). |


| Term 5 64-78 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ARE 370: Teaching Visual Culture |  | 3 | C | - Students must complete an Art Education Proficiency Form with an advisor and have an art education faculty mentor approve the proficiency coursework if they have not done so already. Art Education Proficiency courses: ARA, ARE ARS and ART prefix; cannot be ARA 311, ARS 100 or ARS 300. <br> - Teachers College requirement: Students pursuing K-12 certification should meet with an advisor to discuss the remaining certification requirements and to properly plan their electives. |
| ARE 494: Special Topics |  | 3 | C |  |
| Upper Division ARS with Non-Western focus AND Upper Division Humanities, Fine Arts and Design (HU) |  | 3 | C |  |
| Art Education Proficiency |  | 6 | C |  |
|  | Term hours subtotal: | 15 |  |  |


| Term 6 79-93 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ARE 482: Teaching Art Processes |  | 3 | C | - Students must complete an Art Education Proficiency Form with an advisor and have an art education faculty mentor approve the proficiency coursework if they have not done so already. Art Education Proficiency courses: ARA, ARE ARS and ART prefix; cannot be ARA 311, ARS 100 or ARS 300. <br> - Teachers College requirement: Students pursuing K-12 certification should meet with an advisor to discuss the remaining certification requirements and to properly plan their electives. |
| Upper Division Art History 20th Century Focus |  | 3 | C |  |
| Art Education Proficiency |  | 3 | C |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours |  | Hours | Minimum Grade | Notes |


| ARE 486: Art Education: Strategies and Applications | 3 | C |  |
| :--- | :--- | :--- | :--- |
| Upper Division Art Education Proficiency | 6 | C |  |
| Lower Division Elective |  | 3 |  |
| Upper Division Literacy and Critical Inquiry (L) OR | 3 |  |  |
| TEL 315: Child and Adolescent Development (L or SB) | Term hours subtotal: | 15 |  |
|  |  |  |  |

- Students must complete an Art Education Proficiency Form with an advisor and have an art education faculty mentor approve the proficiency coursework if they have not done so already. Art Education Proficiency courses: ARA, ARE ARS and ART prefix; cannot be ARA 311, ARS 100 or ARS 300.
- Teachers College requirement: TEL 315 required for students pursuing K-12 certification.
- Teachers College requirement: Students pursuing K-12 certification should meet with an advisor to discuss the remaining certification requirements and to properly plan their electives.

| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ARE 496: Methods and Assessment of Learning in Art |  | 3 | C | - Students must complete an Art Education Proficiency Form with an advisor and have an art education faculty mentor approve the proficiency coursework if they have not done so already. Art Education Proficiency courses: ARA, ARE ARS and ART prefix; cannot be ARA 311, ARS 100 or ARS 300. <br> - Art education students who are not pursuing K-12 certification take 2 art education proficiency courses this term. <br> - Teachers College requirement: Art education students who are pursuing K-12 certification take BLE 407, which is required for students pursuing K-12 certification. <br> - Teachers College requirement: Students pursuing K-12 certification should meet with an advisor to discuss the remaining certification requirements and to properly plan their electives. |
| Upper Division Art Education Proficiency |  | 3 | C |  |
| Upper Division Art Education Proficiency course OR BLE 407: SEI for Secondary Students |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 12 |  |  |


| 3D Art Course | 2D or 3D Art Course | 2D Art Course |
| :---: | :---: | :---: |
| ART 231: Sculpture I | ART 201: Photography IAND ART 202: Photography I Lab | ART 201: Photography IAND ART 202: Photography I Lab |
| ART 261: Ceramic Survey |  |  |
|  | ART 204: Photography II: Black and White | ART 204: Photography II: Black and White |
| ART 272: Metalworking I: Introduction | ART 205: Photography II: Color | ART 205: Photography II: Color |
| ART 274: Wood I |  |  |
|  | ART 211: Drawing II | ART 211: Drawing II |
| ART 276: Fibers I | ART 214: Life Drawing I | ART 214: Life Drawing I |
| ART 294: Intermedia Practices |  |  |
|  | ART 223: Painting I | ART 223: Painting I |
|  | ART 227: Watercolor I | ART 227: Watercolor I |
|  | ART 231: Sculpture I | ART 253: Introduction to Printmaking |
|  | ART 253: Introduction to Printmaking |  |
|  | ART 261: Ceramic Survey <br> Academic Catalog Archive 2011 | 12893 |


|  | ART 272: Metalworking I: Introduction |
| :---: | :---: |
|  | ART 274: Wood I |
|  | ART 276: Fibers I |
|  | ART 294: Intermedia Practices |
| Art History 20th Century Focus | Art History Non-Western Focus |
| ARS 340: Art in America ( HU \& H) | ARS 302: Art/ Africa,Oceania \& Americas |
| ARS 436: The Artist, War, and Revolution (Versailles to Vietnam) (HU) | ARS 362: Pre-Columbian Art I (HU \& H) |
| ARS 438: Art of the 20th Century I (HU \& H) | ARS 365: Native North American Art (HU \& C \& H) |
| ARS 439: Art of the 20th Century II (HU \& H) | ARS 465: Native North American Art (HU \& C \& H) |
| ARS 442: Critical Issues in American Painting (HU) | ARS 466: Native American Art of the Southwest (HU \& C \& H) |
| ARS 458: Critical Theories in the Visual Arts (HU) | ARS 468: Art of the Arctic and Northwest Coast (HU \& C \& H) |
| ARS 459: Writing Art Criticism | ARS 469: Mexican Art (HU \& H) |
| ARS 460: Art Now | ARS 472: Art of China (HU) |
| ARS 485: Women in the Visual Arts (L) | ARS 473: Art of Japan (HU) |
|  | ARS 475: Chinese Painting (HU) |

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map Art (Art History), BA

Herberger Institute for Design and the Arts
Campus:Tempe
FAARTHBA

| Term 1 0-17 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 ASU 101: The ASU Experience | 1 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) | 3 | B- |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | B- |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| Related Area Course | 3 | C | - ASU 101 or College specific equivalent First Year Seminar |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), not including American Sign Language IV . | 4 | C | required of all freshman students. <br> - 6 hours of ART courses are |
| 1 Minimum 3.00 GPA ASU Cumulative. |  |  | - 6 hours of ART courses are recommended; ART 201 |
| Term hours subtotal: | 17 |  | - Second language requirement: cannot select from American Sign Language |




| Art History Renaissance/ Baroque Focus | Art History Modern/ Contemporary Focus | ART Related Area Course |
| :---: | :---: | :---: |
| ARS 310: The Renaissance in Tuscany | ARS 340: Art in America (HU \& H) | ART 111: Drawing I |
| ARS 418: German Renaissance and Reformation Art (HU) | ARS 432: 19th-Century French Art and Culture (HU \& H) | ART 112: 2-D Design |
| ARS 422: Italian High Renaissance Art and Mannerism (HU) | ARS 434: Art and Visual Culture of 19th Century (HU) | ART 113: Color ART 115: 3-D Design |
| ARS 424: Italian Baroque Art (HU \& H) | ARS 435: The Pre-Raphaelites Academic Catalog Archive 201 | ART 201: Photography IAND ART 202: Photography I Lab $12896$ |


| ARS 426: Art of the 17th Century in Northern Europe (HU) | ARS 436: The Artist, War, and Revolution (Versailles to Vietnam) (HU) | ART 274: Wood I |
| :---: | :---: | :---: |
| ARS 428: Art of the 18th Century (HU \& H) | ARS 438: Art of the 20th Century I (HU \& H) ART 29 | ART 294: Special Topics |
| ARS 430: Art of Spain and its Colonies (HU \& H) |  <br> ARA OR H) | ARA OR ARE OR APH Elective |
| ARS 442: Critical Issues in American Painting (HU) |  |  |
| ARS 458: Critical Theories in the Visual Arts (HU) |  |  |
| ARS 459: Writing Art Criticism |  |  |
| ARS 460: Art Now |  |  |
| ARS 485: Women in the Visual Arts (L) |  |  |
| Art History Non-Western Focus |  |  |
| ARS 302: Art/ Africa,Oceania \& Americas (HU \& H \& G) |  |  |
| ARS 362: Pre-Columbian Art I (HU \& H) |  |  |
| ARS 365: Native North American Art (HU \& C \& H) |  |  |
| ARS 465: Native North American Art (HU \& C \& H) |  |  |
| ARS 466: Native American Art of the Southwest (HU \& C \& H) |  |  |
| ARS 468: Art of the Arctic and Northwest Coast (HU \& C \& H) |  |  |
| ARS 469: Mexican Art (HU \& H) |  |  |
| ARS 472: Art of China (HU) |  |  |
| ARS 473: Art of Japan (HU) |  |  |
| ARS 475: Chinese Painting (HU) |  |  |
| ARS 201: Art of Asia (HU \& H \& G) |  |  |
| ARS 202: Art of Africa, Oceania, and the Americas (HU \& H \& G) |  |  |
| Total Hours: 120 <br> Upper Division Hours: 45 minimum <br> Major GPA: 2.00 minimum <br> Cumulative GPA: 2.00 minimum <br> Total hrs at ASU: 30 minimum <br> Hrs Resident Credit for <br> Academic Recognition: 56 minimum <br> Total Community College Hrs: 64 maximum | General University Requirements Legend <br> General Studies Core Requirements: <br> - Literacy and Critical Inquiry (L) <br> - Mathematical Studies (MA) <br> - Computer/Statistics/Quantitative Applications (CS) <br> - Humanities, Fine Arts and Design (HU) <br> - Social and Behavioral Sciences (SB) <br> - Natural Science - Quantitative (SQ) <br> - Natural Science - General (SG) | General Studies Awareness Requirements: <br> - Cultural Diversity in the U.S. (C) <br> - Global Awareness (G) <br> - Historical Awareness (H) <br> First-Year Composition |

## 4 <br> UNIVERSITY

## 2011-2012 Major Map Art (Art Studies), BA

Herberger Institute for Design and the Arts
Campus:Tempe
FAARTSTDBA

| Term 1 0-16 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Complete 2 courses: <br> ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 113: Color OR <br> ART 115: 3-D Design OR <br> ART 194: Introduction to Digital Media | 6 | C | - By term 4, students must complete ART 111, 112, 115 and may choose between ART 113 or 194. <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - All students wishing to major in one of the School of Art's Bachelor of Fine Arts degree programs are placed in the Bachelor of Arts in Art Studies degree program at the time of admission. Students wishing to pursue a BFA should follow the major map for their intended major during the first 4 Terms at ASU until passing the portfolio review. <br> - Students may opt to remain in the Bachelor of Arts in Art Studies major, and there is no portfolio review for this major. |
| 4 ASU 101: The ASU Experience | 1 |  |  |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 2 17-31 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Complete 2 courses: <br> ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 113: Color OR <br> ART 115: 3-D Design OR <br> ART 194: Introduction to Digital Media | 6 | C | - By term 4, students must complete ART 111, 112, 115 and may choose between ART 113 or 194. <br> - All students wishing to major in one of the School of Art's Bachelor of Fine Arts degree programs are placed in the Bachelor of Arts in Art Studies degree program at the time of admission. Students wishing to pursue a BFA should follow the major map for their intended major during the first 4 Terms at ASU until passing the portfolio review. <br> - Students may opt to remain in the Bachelor of Arts in Art Studies major, and there is no portfolio review for this major. |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |

Term 3 32-47 Credit Hours Critical course signified by
Hours Minimum


| Upper Division Related Area Course | 3 | C |
| :--- | :---: | :---: |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |
| Elective |  | 3 |
|  | Term hours subtotal: | 15 |

American Indian Studies,
Architecture or Design History, Design Studies, Transborder Chicana/o \& Latina/o Studies, Humanities, Literature, History Religious Studies, Women's Studies. Course selections must be approved by the School of Art.

| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ARA OR ARE OR ARS OR ART Upper Division Elective | 3 | C | - Related area elective - choose a course related to art outside of the School of Art. May include African/ African/ American Studies, Anthropology, American Indian Studies, Architecture or Design History, Design Studies, Transborder Chicana/o \& Latina/o Studies, Humanities, Literature, History, Religious Studies, Women's Studies. Course selections must be approved by the School of Art. |
| Upper Division Performing Arts Elective |  |  |  |
| DCE OR FMP OR MHL OR MTC OR MUE OR MUP OR MUS OR THE OR THP Upper Division Elective | 3 | C |  |
| Upper Division Elective | 6 |  |  |
| Complete 2 courses: Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |


| 3D Art Course | 2D or 3D Art Course | 2D Art Course |
| :---: | :---: | :---: |
| ART 231: Sculpture I | ART 201: Photography IAND ART 202: Photography I Lab | ART 201: Photography IAND ART 202: Photography I Lab |
| RT 261: Ceramic Survey |  |  |
|  | ART 204: Photography II: Black and White | ART 204: Photography II: Black and White |
| ART 272: Metalworking I: Introduction | ART 205: Photography II: Color | ART 205: Photography II: Color |
| ART 274: Wood I |  |  |
|  | ART 211: Drawing II | ART 211: Drawing II |
| ART 276: Fibers I | ART 214: Life Drawing I | ART 214: Life Drawing I |
| ART 294: Intermedia Practices |  |  |
|  | ART 223: Painting I | ART 223: Painting I |
|  | ART 227: Watercolor I | ART 227: Watercolor I |
|  | ART 231: Sculpture I | ART 253: Introduction to Printmaking |
|  | ART 253: Introduction to Printmaking |  |
|  | ART 261: Ceramic Survey |  |
|  | ART 272: Metalworking I: Introduction |  |
|  | ART 274: Wood I |  |
|  | ART 276: Fibers I |  |
|  | ART 294: Intermedia Practices |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map <br> Art (Ceramics), BFA

Herberger Institute for Design and the Arts
Campus:Tempe
FAARTCBFA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 ASU 101: The ASU Experience | 1 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - ART 112 and 115 recommended for Ceramics majors. |
| Complete 2 courses: <br> ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 113: Color OR <br> ART 115: 3-D Design | 6 | C |  |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-31 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) | 3 | C | - ART 261 recommended in Term |
| Complete 2 courses: <br> ART 111: Drawing I OR <br> ART 112: 2-D Design OR ART 113: Color OR ART 115: 3-D Design OR ART 261: Ceramic Survey | 6 | C | 2 or 3 for Ceramics majors. ART 261 must be completed by Term 3. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4. 2D or 3D Art Course (not ART 261) | 3 | C | - ART 261 must be completed by end of term 3 |
| ART 111: Drawing I OR <br> ART 112: 2-D Design OR ART 113: Color OR ART 115: 3-D Design OR ART 261: Ceramic Survey | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| 4. Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |
| \% Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| 1. Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |



| 2D or 3D Art Course | 3D Art Course | 2D Art Course |
| :---: | :---: | :---: |
| ART 201: Photography IAND ART 202: Photography I Lab | ART 231: Sculpture I | ART 201: Photography IAND ART 202: Photography I Lab |
| ART 204: Photography II: Black and White | ART 261: Ceramic Survey | S |
|  | ART 272: Metalworking I: Introduction |  |
| RT 205: Photography II: Colo | ART 274: Wood I | 205: Photography II |
| ART 211: Drawing II |  | ART 211: Drawing II |
| ART 214: Life Drawing I | ART 276: Fibers I | ART 214: Life Drawing I |
| ART 223: Painting I | ART 294: Intermedia Practices | ART 223: Painting I |
| ART 227: Watercolor I |  | ART 227: Watercolor I |
| ART 231: Sculpture I |  | ART 253: Introduction to Printmaking |
| ART 253: Introduction to Printmaking |  |  |
| ART 261: Ceramic Survey |  |  |
| ART 272: Metalworking I: Introduction |  |  |
| ART 274: Wood I |  |  |
| ART 276: Fibers I |  |  |
| ART 294: Intermedia Practices |  |  |
| Art History 20th Century Focus | Art History Non-Western Focus |  |
| ARS 340: Art in America (HU \& H) | ARS 302: Art/ Africa,Oceania \& Americas ( $\mathrm{HU} \& \mathrm{H} \& \mathrm{G}$ ) |  |
| ARS 436: The Artist, War, and Revolution (Versailles to Vietnam) (HU) | ARS 362: Pre-Columbian Art I (HU \& H) |  |
| ARS 438: Art of the 20th Century I (HU \& H) | ARS 365: Native North American Art (HU \& C \& H) |  |
| ARS 439: Art of the 20th Century II (HU \& H) | ARS 465: Native North American Art (HU \& C \& H) |  |
| ARS 442: Critical Issues in American Painting (HU) | ARS 466: Native American Art of the Southwest (HU \& C \& H) |  |
| ARS 458: Critical Theories in the Visual Arts (HU) | ARS 468: Art of the Arctic and Northwest Coast (HU \& C \& H) |  |
| ARS 459: Writing Art Criticism | ARS 469: Mexican Art (HU \& H) |  |
| ARS 460: Art Now |  |  |
| ARS 485: Women in the Visual Arts (L) | ARS 472: Art of China (HU) |  |
|  | ARS 473: Art of Japan (HU) |  |
|  | ARS 475: Chinese Painting (HU) |  |

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Art (Drawing), BFA

Herberger Institute for Design and the Arts
Campus:Tempe
FAARTDBFA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {! }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 ASU 101: The ASU Experience | 1 |  | - ART 111 and 112 recommended for Drawing majors in Term 1. <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| Complete 2 courses: <br> ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 113: Color OR <br> ART 115: 3-D Design | 6 | C |  |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |

Complete 2 courses:
ART 111: Drawing I OR
ART 112: 2-D Design OR
ART 113: Color OR
6
C
ART 115: 3-D Design OR
ART 211: Drawing II OR
ART 214: Life Drawing I
4. ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR

ARS 102: Art from Renaissance to Present (HU \& H)
3
C

ENG 101 or ENG 102: First-Year Composition OR
ENG 105: Advanced First-Year Composition OR
ENG 107 or ENG 108: English for Foreign Students
Computer/Statistics/Quantitative Applications (CS)

- C

Minimum 3.00 GPA in ARA, ARE, ARS and ART.
Minimum 2.70 GPA ASU Cumulative.
Term hours subtotal:
15

Term 3-47 Credit Hours Critical course signified by
Hours Minimum

- ART 211 OR ART 214 and a 100-level ART course are recommended for Drawing majors in Term 2. ART 211 and 214 must be completed by Term 3.


## Complete 2 courses:

ART 111: Drawing I OR
ART 112: 2-D Design OR
4. ART 113: Color OR ART 115: 3-D Design OR ART 211: Drawing II OR ART 214: Life Drawing I
Literacy and Critical Inquiry (L) 3
Natural Science - Quantitative (SQ) 4

Social and Behavioral Sciences (SB) AND Global Awareness (G)3

- Minimum 3.00 GPA in ARA , ARE , ARS and ART.

Minimum 2.70 GPA ASU Cumulative.
4 Complete First-Year Composition requirement.
1 Complete Mathematics (MA) requirement.

- Complete ART 211 OR 214 (whichever was not taken in term 2)
- Complete ART 211 and ART 214 by end of term 3


| Term 6 79-93 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ART 411: Drawing IV |  | 3 | C | - Art elective course cannot be ARA 311, ARS 100 or ARS 300 <br> - Students must complete 9 hours of ARS coursework (not from ARS 100 or 300), Must include 6 hours upper division, 1 non-western course, and 1 20th century course. If students take a lower division non-Western course, the 20th-century and elective must be upper division and one must include an HU general studies designation. |
| ART 414: Life Drawing III |  | 3 | C |  |
| Upper Division ARS Elective |  | 3 | C |  |
| ARA OR ARE OR ARS OR ART Elective |  | 3 | C |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |


| Term 7 7 94-108 Credit Hours | Hours | Minimum <br> Grade |  |
| :--- | :--- | :--- | :--- |
| Complete 2 courses: <br> ART 411: Drawing IV OR <br> ART 414: Life Drawing III OR <br> Upper Division ART 494: Special Topics *Drawing OR <br> ART 499: Individualized Instruction |  |  |  |
| ARA OR ARE OR ARS OR ART Upper Division Elective | 6 | C |  |
| Upper Division Literacy and Critical Inquiry (L) |  |  |  |
| Elective | Term hours subtotal: | Art elective course cannot be |  |
| ARA 311, ARS 100 or ARS 300 |  |  |  |


| ARA OR ARE OR ARS OR ART Upper Division Elective | 3 | C |
| :--- | :---: | :---: |
| ARA OR ARE OR ARS OR ART Elective | 2 | C |
| Elective | Term hours subtotal: | 12 |
|  |  |  |


| 3D Art Course | 2D or 3D Art Course | Art History Non-Western Focus |
| :---: | :---: | :---: |
| ART 231: Sculpture I | ART 201: Photography IAND ART 202: Photography I Lab | ARS 201: Art of Asia (HU \& H \& G) |
| ART 261: Ceramic Survey |  | ARS 202: Art of Africa, Oceania, and the Americas (HU \& H \& G) |
|  | ART 204: Photography II: Black and White |  |
| ART 272: Metalworking I: Introduction | ART 205: Photography II: Color | ARS 302: Art/ Africa,Oceania \& Americas (HU \& H \& G) |
| ART 274: Wood I |  |  |
| ART 276: Fibers I | ART 211: Drawing II | ARS 362: Pre-Columbian Art I (HU \& H) |
| ART 294: Intermedia Practices | ART 214: Life Drawing I | ARS 365: Native North American Art (HU \& C \& H) |
|  | ART 223: Painting I |  |
|  | ART 227: Watercolor I | ARS 465: Native North American Art (HU \& C \& H) |
|  | ART 231: Sculpture I | ARS 466: Native American Art of the Southwest (HU \& C \& H) |
|  | ART 253: Introduction to Printmaking |  |
|  | ART 261: Ceramic Survey | ARS 468: Art of the Arctic and Northwest Coast (HU \& C \& H) |
|  | ART 272: Metalworking I: Introduction | ARS 469: Mexican Art (HU \& H) |
|  | ART 274: Wood I | ARS 472: Art of China (HU) |
|  | ART 276: Fibers I |  |
|  | ART 276. Fibers I | ARS 473: Art of Japan (HU) |
|  | ART 294: Intermedia Practices | ARS 475: Chinese Painting (HU) |
| Art History 20th Century Focus |  |  |
| ARS 340: Art in America (HU \& H) |  |  |
| ARS 436: The Artist, War, and Revolution (Versailles to Vietnam) (HU) |  |  |
| ARS 438: Art of the 20th Century I (HU \& H) |  |  |
| ARS 439: Art of the 20th Century II (HU \& H) |  |  |
| ARS 442: Critical Issues in American Painting (HU) |  |  |
| ARS 458: Critical Theories in the Visual Arts (HU) |  |  |
| ARS 459: Writing Art Criticism |  |  |
| ARS 460: Art Now |  |  |
| ARS 485: Women in the Visual Arts (L) |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Art (Fibers), BFA

Herberger Institute for Design and the Arts
Campus:Tempe
FAARTFBFA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {! }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4. ASU 101: The ASU Experience | 1 |  | - ART 112 and 115 recommended for Fibers majors in Term 1. <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| Complete 2 courses: <br> ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 113: Color OR <br> ART 115: 3-D Design | 6 | C |  |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| Minimum 3.00 GPA in ARA , ARE, ARS and ART. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-31 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 113: Color OR <br> ART 115: 3-D Design OR <br> ART 276: Fibers I | 6 | C | - ART 276 recommended for Fibers majors in Term 2 or 3, and must be completed by Term 3. |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| ART 111: Drawing I OR <br> ART 112: 2-D Design OR ART 113: Color OR ART 115: 3-D Design OR ART 276: Fibers I | 3 | C | - ARS 101 and ARS 102 must be completed by end of term 3 <br> - ART 276 must be completed by end of term 3 . |
| 4. 2D or 3D Art Course (not ART 276) | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| 1. Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| 4 Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |



[^8]| ART 261: Ceramic Survey | ART 201: Photography IAND ART 202: Photography I Lab | ART 201: Photography IAND ART 202: <br> Photography I Lab |
| :---: | :---: | :---: |
| ART 272: Metalworking I: Introduction | ART 204: Photography II: Black and White | ART 204: Photography II: Black and White |
| ART 274: Wood I | ART 205: Photography II: Color | ART 205: Photography II: Color |
| ART 276: Fibers I | ART 211: Drawing II | ART 211: Drawing II |
| ART 294: Intermedia Practices | ART 214: Life Drawing I | ART 214: Life Drawing I |
|  | ART 223: Painting I | ART 223: Painting I |
|  | ART 227: Watercolor I | ART 227: Watercolor I |
|  | ART 231: Sculpture I | ART 253: Introduction to Printmaking |
|  | ART 253: Introduction to Printmaking |  |
|  | ART 261: Ceramic Survey |  |
|  | ART 272: Metalworking I: Introduction |  |
|  | ART 274: Wood I |  |
|  | ART 276: Fibers I |  |
|  | ART 294: Intermedia Practices |  |
| Art History 20th Century Focus | Art History Non-Western Focus |  |
| ARS 340: Art in America (HU \& H) | ARS 302: Art/ Africa,Oceania \& Americas <br> (HU \& H \& G) |  |
| ARS 436: The Artist, War, and Revolution (Versailles to Vietnam) (HU) | ARS 362: Pre-Columbian Art I (HU \& H) |  |
| ARS 438: Art of the 20th Century I (HU \& H) | ARS 365: Native North American Art (HU \& C \& H) |  |
| ARS 439: Art of the 20th Century II (HU \& H) | ARS 465: Native North American Art (HU \& C \& H) |  |
| ARS 442: Critical Issues in American Painting (HU) | ARS 466: Native American Art of the Southwest (HU \& C \& H) |  |
| ARS 458: Critical Theories in the Visual Arts (HU) | ARS 468: Art of the Arctic and Northwest Coast (HU \& C \& H) |  |
| ARS 459: Writing Art Criticism | ARS 469: Mexican Art (HU \& H) |  |
| ARS 460: Art Now | ARS 472: Art of China (HU) |  |
| ARS 485: Women in the Visual Arts (L) | ARS 473: Art of Japan (HU) |  |
|  | ARS 475: Chinese Painting (HU) |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Art (Intermedia), BFA <br> Herberger Institute for Design and the Arts <br> Campus:Tempe <br> FAARTIBFA

| Term 1 0-16 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 ASU 101: The ASU Experience | 1 |  | - ART 111 and 194 recommended for Intermedia majors in Term 1. <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 115: 3-D Design OR <br> ART 194: Introduction to Digital Media | 6 | C |  |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) | 3 | C | - ART 294 recommended for Intermedia majors in Term 2 and must be completed by Term 3. Students who did not take ART 194 in Term 1 must take it in Term 2. |
| Complete 2 courses: <br> ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 115: 3-D Design OR <br> ART 194: Introduction to Digital Media OR <br> ART 294: Intro Intermedia | 6 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Minimum 3.00 GPA in ARA , ARE, ARS and ART. |  |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| ART 111: Drawing I OR <br> ART 112: 2-D Design OR ART 115: 3-D Design OR ART 194: Introduction to Digital Media OR ART 294: Intro Intermedia | 3 | C | - ARS 101 and ARS 102 must be completed by end of term 3 <br> - ART 294 must be completed by end of term 3 |
| 4 ART 2D or 3D elective (not ART 294 *Intermedia) | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| 1. Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |


| 2D Art Course | 3 | C |
| :--- | :--- | :--- |
| ART 231: Sculpture I OR <br> ART 261: Ceramic Survey OR <br> ART 272: Metalworking I: Introduction OR <br> ART 274: Wood I OR <br> ART 276: Fibers I | 3 | C |
| ARS elective |  |  |
| Social and Behavioral Sciences (SB) AND <br> Global Awareness (G) | 3 | C |
| Natural Science - Quantitative (SQ) AND Natural Science - <br> General (SG) | 3 |  |
| Minimum 3.00 GPA in ARA , ARE , ARS and ART. | 4 |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |
| Milestone: Completion of successful portfolio review |  |  |
| Milestone: Meet with academic advisor or faculty member once <br> portfolio results are received |  |  |

- Students must complete 9 hours of ARS coursework (not from ARS 100 or 300); Must include 6 hours upper division, 1 non-western course and 1 20th century course. If students take a lower division non-Western course, the 20th-century and elective must be upper division and one must include an HU general studies designation.
- Intermedia majors must successfully complete a portfolio review for entrance into upper division coursework in the major and this generally takes place in your fourth term at ASU. For more information,
see:art.asu.edu/students/prospective/undergrad/applyportfolio.php

| Term 5 64-78 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ART 443: Intermedia Performance |  | 3 | C | - ART 346 recommended for 3D Animation \& Imaging students <br> - ARS course not from ARS 300 <br> - Art elective course cannot be ARA 311, ARS 100 or ARS 300 <br> - Students must complete 9 hours of ARS coursework (not from ARS 100 or 300); Must include 6 hours upper division, 1 non-western course and 1 20th century course. If students take a lower division non-Western course, the 20th-century and elective must be upper division and one must include an HU general studies designation. |
| Upper Division Intermedia Elective |  | 3 | C |  |
| ARA OR ARE OR ARS OR ART Upper Division Elective |  | 3 | C |  |
| Upper Division ARS with 20th Century Focus |  | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |


| Term 6 79-94 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ART 439: Intermedia Studio |  | 3 | C | - Art elective course cannot be ARA 311, ARS 100 or ARS 300 |
| ART 440: New Media Concepts AND ART 441: Video Art |  | 4 | C |  |
| ARA OR ARE OR ARS OR ART Upper Division Elective |  | 3 | C |  |
| Elective |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 7 95-107 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Intermedia Elective |  | 6 | C | - Art elective course cannot be ARA 311, ARS 100 or ARS 300 <br> - Students must complete 9 hours of ARS coursework (not from ARS 100 or 300); Must include 6 hours upper division, 1 non-western course and 1 20th century course. If students take a lower division non-Western course, the 20th-century and elective must be upper division and one must include an HU general studies designation. |
| Upper Division ARS with Non-Western focus AND Upper Division Humanities, Fine Arts and Design (HU) |  | 3 | C |  |
| ARA OR ARE OR ARS OR ART Elective |  | 4 | C |  |
|  | Term hours subtotal: | 13 |  |  |

## Minimum

| Term 8 | $108-120$ Credit Hours | Hours | Grade | Notes |
| :--- | :--- | :--- | :--- | :--- |
| ART 494: Senior Exhibition/Portfolio | 1 | C |  |  |
| Upper Division Intermedia Elective |  | 6 | C |  |
| Elective |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 13 |  |  |


| 2D or 3D Art Course | Intermedia Elective | 2D Art Course |
| :---: | :---: | :---: |
| ART 201: Photography IAND ART 202: Photography I Lab | ART 345: Visualization and Prototyping | ART 201: Photography IAND ART 202: Photography I Lab |
| ART 204: Photography II: Black and White | ART 346: 3-D Computer Imaging and Animation (CS) | ART 204: Photography II: Black and White |
| ART 205: Photography II: Color | ART 348: Animation Motion Studies | ART 205: Photography II: Color |
| ART 211: Drawing II | ART 449: Computer Animation and Video | ART 211: Drawing II |
| ART 214: Life Drawing I | ART 450: Computer Animation and Audio | ART 214: Life Drawing I |
| ART 223: Painting I | ART 470: Computer Animation Portfolio (CS) | ART 223: Painting I |
| ART 227: Watercolor I |  | ART 227: Watercolor I |
| ART 231: Sculpture I | ART 494: Special Topics *Intermedia | ART 253: Introduction to Printmaking |
| ART 253: Introduction to Printmaking |  |  |
| ART 261: Ceramic Survey |  |  |
| ART 272: Introduction to Metals and Jewelry |  |  |
| ART 274: Wood I |  |  |
| ART 276: Fibers I |  |  |
| Art History 20th Century Focus | Art History Non-Western Focus |  |
| ARS 340: Art in America (HU \& H) | ARS 302: Art/ Africa,Oceania \& Americas ( $\mathrm{HU} \& \mathrm{H} \& \mathrm{G}$ ) |  |
| ARS 436: The Artist, War, and Revolution (Versailles to Vietnam) (HU) | ARS 362: Pre-Columbian Art I (HU \& H) |  |
| ARS 438: Art of the 20th Century I (HU \& H) | ARS 365: Native North American Art (HU \& C \& H) |  |
| ARS 439: Art of the 20th Century II (HU \& H) | ARS 465: Native North American Art (HU \& C \& H) |  |
| ARS 442: Critical Issues in American Painting (HU) | ARS 466: Native American Art of the Southwest (HU \& C \& H) |  |
| ARS 458: Critical Theories in the Visual Arts (HU) | ARS 468: Art of the Arctic and Northwest Coast (HU \& C \& H) |  |
| ARS 459: Writing Art Criticism | ARS 469: Mexican Art (HU \& H) |  |
| ARS 460: Art Now |  |  |
| ARS 485: Women in the Visual Arts (L) | ARS 473: Art of Japan (HU) |  |
|  | ARS 475: Chinese Painting (HU) |  |

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Art (Metals), BFA

Herberger Institute for Design and the Arts
Campus:Tempe
FAARTMBFA

| Term 1 0-16 Credit Hours Critical course signified by 9 . | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 ASU 101: The ASU Experience | 1 |  | - ART 112 and ART 115 recommended in term 1 for Metals majors. <br> - An SAT, ACT, Accuplacer, TOEFL score determines |
| Complete 2 courses: <br> ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 113: Color OR <br> ART 115: 3-D Design | 6 | C |  |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) | 3 | C | placement into first-year composition courses |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - ASU Math Placement Exam score determines placement in |
| MAT 142: College Mathematics (MA) | 3 |  | - ASU 101 or College specific |
| Minimum 2.70 GPA ASU Cumulative. |  |  | equivalent First Year Seminar |
| Minimum 3.00 GPA in ARA , ARE, ARS and ART. |  |  | required of all freshman |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-32 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 113: Color OR <br> ART 115: 3-D Design OR <br> ART 272: Introduction to Metals and Jewelry | 6 | C | - ART 272 recommended in Term 2 or 3 for Metals majors and must be completed by term 3 . |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |

ART 111: Drawing I OR
ART 112: 2-D Design OR
4. ART 113: Color OR
$3 \quad \mathrm{C}$

ART 115: 3-D Design OR
ART 272: Introduction to Metals and Jewelry

| 1 2D or 3D Art Course (not ART 272) | 3 |
| :--- | :---: |
| Natural Science - Quantitative (SQ) AND Natural Science - General (SG) | 4 |
| Literacy and Critical Inquiry (L) | 3 |
| Social and Behavioral Sciences (SB) AND <br> Global Awareness (G) | 3 |

Minimum 2.70 GPA ASU Cumulative.
Minimum 3.00 GPA in ARA , ARE, ARS and ART.
Milestone: ARS 101 and ARS 102 must be completed by the end of Term 3.
4 Milestone: ART 272 must be completed by the end of Term 3 .
4 Complete First-Year Composition requirement.
Complete Mathematics (MA) requirement.


| ART 494: Senior Exhibition/Portfolio | 1 | C |
| :--- | :--- | :--- |
| Metals Elective | 3 |  |
| ART 472: Advanced Metals Surface Techniques OR |  |  |
| ART 473: Advanced Metals \& Mechanisms OR |  |  |
| ART 494: Metalworking OR |  |  |
| ART 499: Individualized Instruction |  |  |
| ART 473: Advanced Metals and Mechanisms OR <br> Upper Division ART Elective | 3 |  |
| Complete 2 courses: <br> ARA OR ARE OR ARS OR ART Upper Division Elective | Term hours subtotal: | 13 |


| 3D Art Course | 2D or 3D Art Course | 2D Art Course |
| :---: | :---: | :---: |
| ART 231: Sculpture I | ART 201: Photography IAND ART 202: Photography I Lab | ART 201: Photography IAND ART 202: Photography I Lab |
| ART 261: Ceramic Survey |  |  |
| ART 261. Ceramic Surve | ART 204: Photography II: Black and White | ART 204: Photography II: Black and White |
| ART 272: Metalworking I: Introduction | ART 205: Photography II: Color | ART 205: Photography II: Color |
| ART 274: Wood I |  |  |
| ART 276. Fibers I | ART 211: Drawing II | ART 211: Drawing II |
| ART 294: Intermedia Practices | ART 214: Life Drawing I | ART 214: Life Drawing I |
|  | ART 223: Painting I | ART 223: Painting I |
|  | ART 227: Watercolor I | ART 227: Watercolor I |
|  | ART 231: Sculpture I | ART 253: Introduction to Printmaking |
|  | ART 253: Introduction to Printmaking |  |
|  | ART 261: Ceramic Survey |  |
|  | ART 272: Metalworking I: Introduction |  |
|  | ART 274: Wood I |  |
|  | ART 276: Fibers I |  |
|  | ART 294: Intermedia Practices |  |
| Art History 20th Century Focus | Art History Non-Western Focus |  |
| ARS 340: Art in America (HU \& H) | ARS 302: Art/ Africa,Oceania \& Americas (HU \& H \& G) |  |
| ARS 436: The Artist, War, and Revolution (Versailles to Vietnam) (HU) | ARS 362: Pre-Columbian Art I (HU \& H) |  |
| ARS 438: Art of the 20th Century I (HU \& H) | ARS 365: Native North American Art (HU \& C \& H) |  |
| ARS 439: Art of the 20th Century II (HU \& H) | ARS 465: Native North American Art (HU \& C \& H) |  |
| ARS 442: Critical Issues in American Painting (HU) | ARS 466: Native American Art of the Southwest (HU \& C \& H) |  |
| ARS 458: Critical Theories in the Visual Arts (HU) | ARS 468: Art of the Arctic and Northwest Coast (HU \& C \& H) |  |
| ARS 459: Writing Art Criticism |  |  |
| ARS 460: Art Now | ARS 469: Mexican Art (HU \& H) |  |
| ARS 485: Women in the Visual Arts (L) | ARS 473: Art of Japan (HU) |  |
|  | ARS 475: Chinese Painting (HU) |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Art (Museum Studies), BA <br> Herberger Institute for Design and the Arts <br> Campus:Tempe <br> FAARTMSBA


ARS 402: Art of Ancient Egypt (HU \& H) OR
ARS 404: Greek Art (HU \& H) OR
ARS 406: Roman Art (HU \& H)

| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| :--- | :--- | :---: | :---: |
|  | Term hours subtotal: | 14 |  |
| Term 5 $62-76$ Credit Hours |  | Hours | Minimum <br> Grade |
| Art History (Medieval) |  |  |  |
| ARS 410: Early Christian and Byzantine Art (HU) OR | 3 | C |  |
| ARS 412: Early Medieval Art (HU) OR |  |  |  |
| ARS 414: Romanesque Art (HU \& H) OR |  |  |  |
| ARS 416: Gothic Art (HU \& H) OR |  |  |  |
| ARS 417: Late Gothic Art in Central Europe |  |  |  |

Introduction to Museums
ARA 394: Museum Educators, Museums and Art History in Society, Museums and Galleries London OR
ARA 494: Museums and Galleries of London OR
ARS 494: Introduction to Museums, Museums \& Galleries of Florence, Museums and Galleries of Florence, Museums and Galleries of London OR ASB 471: Introduction to Museums (L)

| Related Area Course | 3 |  |
| :--- | :--- | :---: |
| Upper Division Elective | 3 |  |
| Elective |  | 3 |
|  | Term hours subtotal: | 15 |


| Term 6 77-91 Credit Hours | Hours | Minimum <br> Grade |  |
| :--- | :--- | :---: | :---: |
| ARS 480: Research Methods (L) | 3 | C |  |
| Upper Division Art History Renaissance/Baroque Focus |  | 3 | C |
| Related Area Course |  | 3 |  |
| Complete 2 courses: <br> Upper Division Elective | Term hours subtotal: | 15 |  |
|  |  |  |  |

- Related study course: complete C, hours, see list. These courses provide a range of potentially useful information for museum studies majors. The department recommends selecting at least 6 hours from upper division options. Substitutes must be approved by the department.

| Upper Division Elective | 3 |
| :---: | :---: | :---: |

recommends selecting at least 6 hours from upper division options. Substitutes must be approved by the department

| Art History Renaissance/ Baroque Focus | Art History Modern/ Contemporary Focus | Related Study |
| :---: | :---: | :---: |
| ARS 310: The Renaissance in Tuscany | ARS 340: Art in America (HU \& H) | ACC 382: Accounting and Financial Analysis |
| ARS 418: German Renaissance and Reformation Art (HU) | ARS 432: 19th-Century French Art and Culture (HU \& H) | ACC 394: Accounting Principles |
| ARS 422: Italian High Renaissance Art and Mannerism (HU) | ARS 434: Art and Visual Culture of 19th Century (HU) | MKT 382: Essentials of Advertising and Marketing Communication |
| ARS 424: Italian Baroque Art (HU \& H) | ARS 435: The Pre-Raphaelites | NLM 191: Voluntary Action/Community |
| ARS 426: Art of the 17th Century in Northern Europe (HU) | ARS 436: The Artist, War, and Revolution (Versailles to Vietnam) (HU) | NLM 220: Introduction to Nonprofit Organizations |
| ARS 428: Art of the 18 th Century (HU \& H) | ARS 438: Art of the 20th Century I (HU \& H) | NLM 300: Fund Raising and Resource Development |
| ARS 430: Art of Spain and its Colonies (HU \& H) | ARS 439: Art of the 20th Century II (HU \& H) | NLM 310: Volunteer Management |
|  | ARS 442: Critical Issues in American Painting (HU) | NLM 430: Managing Nonprofit Organizations |
|  | ARS 458: Critical Theories in the Visual Arts (HU) | PAF 300: Public Management and Administration |
|  | ARS 459: Writing Art Criticism | PAF 340: Public Policy |
|  | ARS 460: Art Now | PAF 420: Public Leadership |
|  | ARS 485: Women in the Visual Arts (L) | PRM 120: Leisure and the Quality of Life (SB) |
|  |  | PRM 210: Community Services and Professions. |
|  |  | PRM 486: Special Events Management |
|  |  | TDM 205: Introduction to Travel and Tourism (G) |
|  |  | TDM 345: Meeting and Convention Planning |
|  |  | TDM 350: Tourism Marketing |
|  |  | TDM 386: Convention Sales and Management |
|  |  | TDM 448: Heritage and Cultural Tourism |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year

## 4 1 ARIZONA State UNIVERSITY

## 2011-2012 Major Map <br> Art (Painting), BFA

Herberger Institute for Design and the Arts
Campus:Tempe
FAARTPABFA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {! }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 ASU 101: The ASU Experience | 1 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - ART 111 and 113 are recommended for painting majors in Term 1. <br> Notes |
| Complete 2 courses: <br> ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 113: Color OR <br> ART 115: 3-D Design | 6 | C |  |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {\% }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ |  |

Complete 2 courses:
ART 111: Drawing I OR
ART 112: 2-D Design OR
ART 113: Color OR
6
C
ART 115: 3-D Design OR
ART 223: Painting I OR
ART 227: Watercolor I
4. ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR
ARS 102: Art from Renaissance to Present (HU \& H)

ARS 102: Art from Renaissance to Present (HU \& H)
3 C
ENG 101 or ENG 102: First-Year Composition OR
ENG 105: Advanced First-Year Composition OR
ENG 107 or ENG 108: English for Foreign Students
Computer/Statistics/Quantitative Applications (CS)
C

Minimum 2.70 GPA ASU Cumulative.
Minimum 3.00 GPA in ARA , ARE, ARS and ART.
Term hours subtotal:
15

Term 3-47 Credit Hours Critical course signified by
Hours Minimum

Complete 2 courses:
ART 111: Drawing I OR
ART 112: 2-D Design OR
(1) ART 113: Color OR

ART 115: 3-D Design OR
ART 223: Painting I OR
ART 227: Watercolor I
Literacy and Critical Inquiry (L) 3

Natural Science - Quantitative (SQ) 4
Social and Behavioral Sciences (SB) AND Global Awareness (G)

## Notes

- ARS 101 and ARS 102 must be completed by end of term 3
- Complete ART 223 and ART 227 by end of term 3

4. Minimum 2.70 GPA ASU Cumulative.

Minimum 3.00 GPA in ARA , ARE, ARS and ART.
4 Complete First-Year Composition requirement.
Complete Mathematics (MA) requirement.

- ART 223 or 227 recommended for painting majors in Term 2. ART 223 and 227 must be completed by Term 3 .


| Upper Division Painting Elective | 3 | C |
| :--- | :---: | :---: |
| ARA OR ARE OR ARS OR ART Upper Division Elective | 3 | C |
| ARA OR ARE OR ARS OR ART Elective |  | 2 |
| Elective | Term hours subtotal: | 12 |
|  |  | C |

- Art elective course cannot be ARA 311, ARS 100 or ARS 300

| Painting Elective | 3D Art Course | 2D or 3D Art Course |
| :---: | :---: | :---: |
| ART 325: Figure Painting | ART 231: Sculpture I | ART 201: Photography IAND ART 202: Photography I Lab |
| ART 423: Painting III | ART 261: Ceramic Survey |  |
|  |  | ART 204: Photography II: Black and White |
| ART 425: Advanced Figure Painting | ART 272: Metaworking I: Introduction | ART 205: Photography II: Color |
| ART 427: Advanced Watermedia | ART 274: Wood I | ART 211: Drawing II |
| ART 494: Painting | ART 276: Fibers I |  |
| ART 499: Individualized Instruction | ART 294: Intermedia Practices | ART 214: Life Drawing I |
|  |  | ART 223: Painting I |
|  |  | ART 227: Watercolor I |
|  |  | ART 231: Sculpture I |
|  |  | ART 253: Introduction to Printmaking |
|  |  | ART 261: Ceramic Survey |
|  |  | ART 272: Metalworking I: Introduction |
|  |  | ART 274: Wood I |
|  |  | ART 276: Fibers I |
|  |  | ART 294: Intermedia Practices |
| 2D Art Course | Art History 20th Century Focus | Art History Non-Western Focus |
| ART 201: Photography IAND ART 202: Photography I Lab | ARS 340: Art in America (HU \& H) | ARS 302: Art/ Africa,Oceania \& Americas (HU \& H \& G) |
| ART 204: Photography II: Black and White | ARS 436: The Artist, War, and Revolution (Versailles to Vietnam) (HU) | ARS 362: Pre-Columbian Art I (HU \& H) |
| ART 205: Photography II: Color | ARS 438: Art of the 20th Century I (HU \& H) | ARS 365: Native North American Art (HU \& C \& H) |
| ART 211: Drawing II | ARS 439: Art of the 20th Century II (HU \& |  |
| ART 214: Life Drawing I |  | ARS 465: Native North American Art (HU \& C \& H) |
| ART 223: Painting I | ARS 442: Critical Issues in American Painting (HU) | ARS 466: Native American Art of the Southwest (HU \& C \& H) |
| ART 227: Watercolor I | ARS 458: Critical Theories in the Visual Arts (HU) | ARS 468: Art of the Arctic and Northwest Coast (HU \& C \& H) |
| ART 253: Introduction to Printmaking | ARS 459: Writing Art Criticism |  |
|  | ARS 459. Wring Art Criticism | ARS 469: Mexican Art (HU \& H) |
|  | ARS 460: Art Now | ARS 472: Art of China (HU) |
|  | ARS 485: Women in the Visual Arts (L) | ARS 473: Art of Japan (HU) |
|  |  | ARS 475: Chinese Painting (HU) |

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Art (Photography), BFA

Herberger Institute for Design and the Arts
Campus:Tempe
FAARTPHBFA

| Term 1 0-16 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. ASU 101: The ASU Experience | 1 |  | - By term 4, photography majors must complete ART 111, 112, 115 , and may choose between ART 113 and 194. <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| Complete 2 courses: <br> ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 113: Color OR <br> ART 115: 3-D Design OR <br> ART 194: Introduction to Digital Media | 6 | C |  |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum <br> Grade | Notes |

Complete 2 courses:
ART 111: Drawing I OR
ART 112: 2-D Design OR
4. ART 113: Color OR
ART 115: 3-D Design OR

6 C
ART 194: Introduction to Digital Media OR
ART 201: Photography I AND
ART 202: Photography I Lab
ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR
ARS 102: Art from Renaissance to Present (HU \& H)
3 C
ENG 101 or ENG 102: First-Year Composition OR
ENG 105: Advanced First-Year Composition OR 3
ENG 107 or ENG 108: English for Foreign Students
Social and Behavioral Sciences (SB) AND
3
Cultural Diversity in the U.S. (C)
Minimum 3.00 GPA in ARA , ARE , ARS and ART.
Minimum 2.70 GPA ASU Cumulative.
Term hours subtotal:
15



| 3D Art Course | Art History Non-Western Focus | Photography Elective |  |
| :--- | :--- | :--- | :--- |
|  | ART 231: Sculpture I | ARS 201: Art of Asia $(\mathrm{HU} \& \mathrm{H} \& \mathrm{G})$ | ART 394: Photography |


| ART 261: Ceramic Survey | ARS 202: Art of Africa, Oceania, and the Americas (HU \& H \& G) | ART 401: Alternative Processes |
| :---: | :---: | :---: |
| ART 272: Metalworking I: Introduction |  | ART 403: Senior Photographic Projects |
| ART 274: Wood I | ARS 302: Art/ Africa,Oceania \& Americas (HU \& H \& G) | ART 404: Portraiture Photography |
| ART 276: Fibers I | ARS 362: Pre-Columbian Art I (HU \& H) | ART 407: View Camera |
| ART 294: Intermedia Practices | ARS 365: Native North American Art (HU \& C \& H) | ART 409: Photographic Exhibition |
|  | ARS 465: Native North American Art (HU \& | ART 410: Landscape Photography |
|  | C \& H) | ART 494: Photography |
|  | ARS 466: Native American Art of the Southwest (HU \& C \& H) | ARA 494: Photomedia |
|  | ARS 468: Art of the Arctic and Northwest Coast (HU \& C \& H) | ARA 498: Photography and Language |
|  | ARS 469: Mexican Art (HU \& H) |  |
|  | ARS 472: Art of China (HU) |  |
|  | ARS 473: Art of Japan (HU) |  |
|  | ARS 475: Chinese Painting (HU) |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Art (Printmaking), BFA <br> Herberger Institute for Design and the Arts <br> Campus:Tempe <br> FAARTPMBFA

| Term 1 - 16 Credit Hours Critical course signified by 9 |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 4 ASU 101: The ASU Experience |  | 1 |  | - ART 113 recommended for printmaking majors in Term 1. <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| Complete 2 courses: <br> ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 113: Color OR <br> ART 115: 3-D Design |  | 6 | C |  |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) |  | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| MAT 142: College Mathematics (MA) |  | 3 |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |  |
| Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 2 17-31 Credit Hours Critical course signified by 9 |  | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 113: Color OR <br> ART 115: 3-D Design OR <br> ART 253: Introduction to Printmaking |  | 6 | C | - ART 113 must be completed by end of term 2 <br> - ART 253 recommended in Term 2 or 3, and must be completed by Term 3. |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) |  | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) |  | 3 |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |  |
| Minimum 3.00 GPA in ARA , ARE, ARS and ART. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by ${ }^{\text {a }}$ |  | Hours | Minimum Grade | Notes |
| ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 113: Color OR <br> ART 115: 3-D Design OR <br> ART 253: Introduction to Printmaking |  | 3 | C | - Complete ARS 101 and ARS 102 by end of Term 3 <br> - Complete ART 253 by end of Term 3 |
| -1 2D Art Course (not ART 253) |  | 3 | C |  |
| Natural Science - Quantitative (SQ) |  | 4 |  |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) |  | 3 |  |  |
| 4. Minimum 2.70 GPA ASU Cumulative. |  |  |  |  |
| 1. Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |  |
| 4. Complete First-Year Composition requirement. |  |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minim Grad | Notes |  |


| 4 2D or 3D Art Course (not ART 253) | 3 | C |
| :--- | :---: | :---: |
| 3D Art Course | 3 | C |
| ARS Elective | 3 | C |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) |  |  |
| Social and Behavioral Sciences (SB) AND <br> Cultural Diversity in the U.S. (C) | 4 |  |
| Minimum 2.70 GPA ASU Cumulative. | 3 |  |
| Minimum 3.00 GPA in ARA, ARE , ARS and ART. |  |  |
| Milestone: Completion of successful portfolio review |  |  |

- Students must complete 9 hours of ARS coursework (not from ARS 100 or 300), Must include 6 hours upper division, 1 non-western course, and 1 20th century course. If students take a lower division non-Western course, the 20th-century and elective must be upper division and one must include an HU general studies designation.
- Printmaking majors must successfully complete a portfolio review for entrance into upper division coursework in the major and this generally takes place in the fourth term at ASU. For more information, see:
art.asu.edu/students/current/undergrad/apply.php

Milestone: Meet with academic advisor or faculty member once portfolio results are received

Term hours subtotal:
16

| Term 5 64-78 Credit Hours | Hours | Minimum <br> Grade |
| :--- | :--- | :---: |
| ART 351: Intaglio I | 3 | C |
| ART 352: Lithography I | 3 | C |
| Upper Division ARS with Non-Western Focus AND | 3 | C |
| Upper Division Humanities, Fine Arts and Design (HU) |  | 3 |
| ARA OR ARE OR ARS OR ART Upper Division Elective |  | 3 |
| Upper Division Elective | Term hours subtotal: | 15 |

- Art elective course cannot be ARA 311, ARS 100 or ARS 300
- Students must complete 9 hours of ARS coursework (not from ARS 100 or 300), Must include 6 hours upper division, 1 non-western course, and 1 20th century course. If students take a lower division non-Western course, the 20th-century and elective must be upper division and one must include an HU general studies designation.

| Term 6 79-93 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ART 354: Screen Printing I |  | 3 | C | - Art elective course cannot be ARA 311, ARS 100 or ARS 300 <br> - Students must complete 9 hours of ARS coursework (not from ARS 100 or 300), Must include 6 hours upper division, 1 non-western course, and 1 20th century course. If students take a lower division non-Western course, the 20th-century and elective must be upper division and one must include an HU general studies designation. |
| Upper Division Printmaking Elective |  | 3 | C |  |
| ARS Upper Division Elective |  | 3 | C |  |
| ARA OR ARE OR ARS OR ART Upper Division Elective |  | 3 | C |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |


| Term 7 94-108 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Complete 2 courses: <br> Upper Division Printmaking Elective | 6 | C | - Art elective course cannot be ARA 311, ARS 100 or ARS 300 |
| ARA OR ARE OR ARS OR ART Upper Division Elective | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Elective | 3 |  |  |
|  | Term hours subtotal: 15 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| ART 494: Senior Exhibition/Portfolio | 1 | C | - Art elective course cannot be ARA 311, ARS 100 or ARS 300 |
| Upper Division Printmaking Elective | 3 | C |  |
| ARA OR ARE OR ARS OR ART Upper Division Elective | 3 | C |  |
| ARA OR ARE OR ARS OR ART Elective | 2 | C |  |
| Elective | 3 |  |  |
|  | Term hours subtotal: 12 |  |  |


| 3D Art Course | 2D or 3D Art Course | 2D Art Course |
| :---: | :---: | :---: |
| ART 231: Sculpture I | ART 201: Photography IAND ART 202: Photography I Lab | ART 201: Photography IAND ART 202: Photography I Lab |
| ART 261: Ceramic Survey |  |  |
| ART 272: Metalworking I: Introduction | ART 204: Photography II: Black and White | ART 204: Photography II: Black and White |
|  | ART 205: Photography II: Color | ART 205: Photography II: Color |
| ART 274: Wood I | ART 211: Drawing II | ART 211: Drawing II |
| ART 276: Fibers I |  |  |
| ART 294: Intermedia Practices | ART 214: Life Drawing I | ART 214: Life Drawing I |
|  | ART 223: Painting I | ART 223: Painting I |
|  | ART 227: Watercolor I | ART 227: Watercolor I |
|  | ART 231: Sculpture I | ART 253: Introduction to Printmaking |
|  | ART 253: Introduction to Printmaking |  |
|  | ART 261: Ceramic Survey |  |
|  | ART 272: Metalworking I: Introduction |  |
|  | ART 274: Wood I |  |
|  | ART 276: Fibers I |  |
|  | ART 294: Intermedia Practices |  |
| Printmaking Elective | Art History Non-Western Focus |  |
| ART 355: Printmaking as Photography | ARS 302: Art/ Africa,Oceania \& Americas ( $\mathrm{HU} \& \mathrm{H} \& \mathrm{G}$ ) |  |
| ART 394: Special Topics | ARS 362: Pre-Columbian Art I (HU \& H) |  |
| ART 451: Advanced Intaglio |  |  |
| ART 452: Advanced Lithography | ARS 365: Native North American Art (HU \& C \& H) |  |
| ART 454: Advanced Screen Printing | ARS 465: Native North American Art (HU \& C \& H) |  |
| ART 455: Advanced Photo Processes for Printmaking | ARS 466: Native American Art of the Southwest (HU \& C \& H) |  |
| ART 456: Fine Printing and Bookmaking I | ARS 468: Art of the Arctic and Northwest Coast (HU \& C \& H) |  |
| ART 457: Fine Printing and Bookmaking II |  |  |
| ART 458: Papermaking | ARS 469: Mexican Art (HU \& H) |  |
| ART 459: Monoprinting | ARS 472: Art of China (HU) |  |
| ART 494: Special Topics: *Printmaking | ARS 473: Art of Japan (HU) |  |
| ART 499: Individualized Instruction | ARS 475: Chinese Painting (HU) |  |

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map <br> Art (Sculpture), BFA

Herberger Institute for Design and the Arts
Campus:Tempe
FAARTSBFA

| Term 1 0-16 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| (1) ASU 101: The ASU Experience | 1 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - ART 111 and 115 recommended for Sculpture majors in Term 1. By term 4, sculpture majors must complete ART 111, 112, 115 and may choose between ART 113 or 194. |
| ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 113: Color OR <br> ART 115: 3-D Design OR <br> ART 194: Introduction to Digital Media | 6 | C |  |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR ARS 102: Art from Renaissance to Present (HU \& H) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |

Term 2 17-31 Credit Hours Critical course signified by $9 \quad$ Hours | Minimum |
| :---: |
| Grade | Notes

Complete 2 courses:
ART 111: Drawing I OR
ART 112: 2-D Design OR
( ART 113: Color OR
6 C
ART 115: 3-D Design OR
ART 194: Introduction to Digital Media OR
ART 231: Sculpture I OR
ART 274: Wood I
. ARS 101: Art from Prehistory Through Middle Ages (HU \& H) OR
.

3 C
ENG 101 or ENG 102: First-Year Composition OR
ENG 105: Advanced First-Year Composition OR
3 C
ENG 107 or ENG 108: English for Foreign Students
Computer/Statistics/Quantitative Applications (CS)
3
Minimum 3.00 GPA in ARA , ARE, ARS and ART.
Minimum 2.70 GPA ASU Cumulative.
Term hours subtotal:
15

| Term 3 32-47 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Complete 2 courses: <br> ART 111: Drawing I OR <br> ART 112: 2-D Design OR <br> ART 113: Color OR <br> ART 115: 3-D Design OR <br> ART 194: Introduction to Digital Media OR <br> ART 231: Sculpture I OR <br> ART 274: Wood I | 6 | C | - ART 231 and ART 274 must be completed by end of term 3 <br> - Sculpture majors can take ART 194 in place of ART 113. |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| 9. Minimum 3.00 GPA in ARA, ARE, ARS and ART. |  |  |  |
| Minimum 2.70 GPA ASU Cumulative. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |



| ART 431: Special Problems in Sculpture |
| :--- |
| ART 432: Neon Sculpture |
| ART 435: Foundry Research Methods |
| ART 436: Architectural Sculpture |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

Major Map : The Arts - Bachelor of Arts (B.A.) (Focus area: Arts Administration)<br>Herberger Institute for Design and the Arts | Catalog Year: 2011-2012



Major Map ：The Arts－Bachelor of Arts（B．A．） （Focus area：Arts Administration）<br>Herberger Institute for Design and the Arts｜Catalog Year：2011－2012

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT：106－120 CREDIT HOURS |  |  |  |  |  |
| ＊Upper Division Capstone Thesis or Independent Research Project： | 3 | 区 |  | Grade of C | －＊Arts Administration Coursework：Refer to focus area list for course selection． <br> －＊＊Related Studies Coursework：Refer to related studies list for course selection． <br> －Minimum 3.0 cumulative GPA required in focus area coursework <br> －Minimum 2．0 ASU cumulative GPA |
| MKT 395 Essentials of Advertising and Marketing Communication OR MKT 390：Essentials of Marketing | 3 | 区 |  | Grade of C |  |
| ACC 382：Accounting and Financial Analysis | 3 | 区 |  | Grade of C |  |
| Upper Division Literacy and Critical Inquiry（L）： | 3 | 区 |  |  |  |
| ＊＊Related Studies Course： | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum） | Total UD Hours <br> （minimum 45） | Cumulative GPA <br> （2．00 minimum） | Total Hrs at ASU <br> （minimum 30） | Resident Credit for Academic <br> Recognition（minimum 56） | Total Comm．College Hrs． <br> （maximum 64） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements： Literacy and Critical Inquiry（L）
－Mathematical Studies（MA）
－Computer／Statistics／Quantitative applications（CS）
－Humanities，Fine Arts，and Design（HU）
－Social and Behavioral Sciences（SB）
－Natural Science－Quantitative（SQ）
－Natural Science－General（SG）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）
－Global Awareness（G）
－Historical Awareness（H）
－First－Year Composition

## Additional Notes：Focus Area Course List

| Arts Disciplinary（must include 3 disciplines； $\mathbf{6}$ hours of <br> 20th Century focused coursework）： <br> 21 hours（15 upper division） |
| :--- |
| Choose 3 courses from： |
| AME 494 History and Analysis of Media Arts |
| AME 494／598 Media Theory＊ |
| ARA 202 Understanding Photographs |
| ARA 498 Photography and Language |
| ARS 101 Art from Prehistory Through Middle Ages |
| ARS 102 Art from Renaissance to Present |
| ARS 3xx／4xx Art History Coursework |
| ARS 458 Critical Theories in the Visual Arts |
| DCE 301 Philosophy and Criticism of Dance |
| DCE 300 Moving Histories |
| FMP 250 Sex and Violence in Film and Television：An <br> Ethics Survey <br> MHL 140 Music as Culture <br> MHL 341 Music History I <br> MHL 342 Music History II <br> MHL 3xx／4xx Music History Coursework <br> MTC 125 Basic Music Theory <br> MTC 221 Music Theory：18 $8^{\text {th }}$ Century <br> MTC 222 Music Theory：19 ${ }^{\text {th }}$ Century <br> MTC 223 Music Theory：20 ${ }^{\text {th }}$ Century <br> THE 322 History of Theatre <br> THE 403 Independent Film <br> THE 404 Foreign Film <br> THE 405 Film Great Performers and Directors <br> THE 422 Latina and Latino Theatre <br> THE 423 African American Theatre <br> THE 424 Trends in Theatre for Youth <br> THE 426 Theatre of the Americas <br> THP 320 Acting：Solo and Collaborative Performance <br> THP 482 Theatre for Social Change <br> Choose 4 courses from Arts Practice Coursework（must <br> include at least 3 disciplines）： <br> ARA，ARE，ARS，ART，DCE，FMP，MHL，MTC，MUP， <br> THP，THE |


| Administration and Leadership（must include 3 <br> disciplines；only $\mathbf{1}$ internship）： $\mathbf{1 2}$ hours |
| :--- |
| Choose 3 courses from： |
| ARA 394 Art Guides：Community Engagement and <br> Learning in the Art Museum |
| ARA 460 Gallery Exhibitions |
| DCE 217 Second Year Seminar（Dance Production） |
| FMP 417 Business Ethics in Film and Media |
| FMP 494 Production Practices in Film and Media |
| THP 251 Student Production Board |
| THP 450 Theatre Organization and Management |
| THP 451 Student Production Board |
| THP 452 Arts Entrepreneurship Seminar |
| THP 482 Theatre for Social Change |
| THP 490 Projects in Community－based Theatre |
| THP 494 Living the Arts |
| Choose 1 internship from： |
| ARS 484，DAH 484，FMP 484，HDA 484，MXX 484， <br> THE 484 |

Capstone Thesis or Independent Research Project： 6 hours（ 6 upper division）

Final synthesis project．Determined in consultation with faculty mentor．

| Related Studies： 21 hours |
| :--- |
| Required： |
| NLM 220 Introduction to Nonprofit Organizations |
| ACC 382 Accounting and Financial Analysis |
| MGT 380 Management \＆Strategy for Nonmajors |
| MGT 394／WPC 294 My Life Venture |
| Choose 1 course from： |
| MKT 382 Advertising \＆Marketing Communication |
| MKT 390 Introduction to Marketing |
| Choose 2 courses from： |
| NLM 300 Fundraising and Resource Development |
| NLM 302 Inclusive Community Development |
| NLM 310 Volunteer Management |
| NLM 430 Managing Nonprofit Organizations |
| NLM 435 Service Learning for Community Devel |
| PRM 210 Community Resources and Professions（note pre－ <br> requisites） |
| PRM 486 Special Events Management |
| PAF 300 Public Management and Administration |
| PAF 340 Public Management and Policy |
| PAF 591 S：Art \＆Public Policy（students with 108 hrs of <br> study may request permission from instructor） |
| TDM 205 Introduction to Travel and Tourism |
| TDM 345 Meeting and Convention Planning |
| TDM 350 Tourism Marketing |
| TDM 371 Tourism Planning |
| TDM 386 Convention Sales and Management |
| TDM 448 Heritage and Cultural Tourism（pre－requisite： <br> PRM 120） <br> TDM 458 International Tourism <br> URB $100 / 300$ Urban \＆Metropolitan Studies（credit for <br> only URB 100 or 300） <br> URB 220 Introduction to Urban America <br> URB 240 Urban Policy <br> URB 302 Urban Theory <br> ECN 382 Managerial Economics <br> FIN 380 Personal Financial Management <br> MKT 382 Advertising and Marketing Communication or <br> MKT 390 Intro to Marketing <br> CIS 300 Web Design and Development <br> LES 380 Consumer Perspectives of Business Law <br>  |

Major Map ：The Arts－Bachelor of Arts（B．A．）<br>（Focus area：Historical and Theoretical Studies in the Arts） Herberger Institute for Design and the Arts｜Catalog Year：2011－2012

|  |  |  | Competed Transfer Pathway： |  | Completed General Education： <br> $\square$ AGEC $\square$ IGETC／CSUGE $\square$ None |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| TERM ONE：0－17 CREDIT HOURS |  |  |  |  |  |
| HDA 194：The ASU Herberger Institute Experience | 1 | $\square$ |  | Grade of C | －ASU 101 is for ASU freshman students only．Not required of transfer students <br> －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> －＊Historical \＆Theoretical Coursework：Refer to focus area list for course selection． <br> －Minimum 3.0 cumulative GPA required in focus area coursework <br> －Minimum 2．0 ASU cumulative GPA |
| ENG 101 and 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 and 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| AME 194：Topics in Media Arts and Digital Culture | 3 | $\square$ |  | Grade of C |  |
| Second Language 101： | 4 | $\square$ |  | Grade of C |  |
| ＊Historical \＆Theoretical Arts Studies Course | 3 | $\square$ |  |  |  |
| MAT 142：College Mathematics（MA） | 3 | $\square$ |  |  |  |
| TERM TWO：18－33 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 and 108：English for Foreign Students | 3 | $\square$ |  | Grade of C | －＊Historical \＆Theoretical Coursework：Refer to focus area list for course selection． <br> －Minimum 3.0 cumulative GPA required in focus area coursework <br> －Minimum 2．0 ASU cumulative GPA <br> －Complete Second Language 101 and 102 by the end of semester 4. <br> －Non－Western historical studies core course list available at the end of this major map． |
| Complete 1 Core Course： <br> HDA 294：Creativity and Innovation in the Arts OR <br> HDA／ARA 394：Writing about the Arts \＆Design（Arts \＆Design Criticism）OR <br> HDA 494：Public Practice：Engagement \＆Community OR Select Herberger Institute Design or Arts historical studies course with non－Western focus | 3 | $\square$ |  | Grade of C |  |
| Second Language 102： | 4 | $\square$ |  | Grade of C |  |
| ＊Historical \＆Theoretical Arts Studies Course： | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Awareness Area－Global（G）， Historical（H）OR Cultural Diversity in the US（C）： | 3 | $\square$ |  |  |  |
| TERM THREE：34－47 CREDIT HOURS |  |  |  |  |  |
| Complete 1 Core Course： <br> HDA 294：Creativity and Innovation in the Arts OR <br> HDA／ARA 394：Writing about the Arts \＆Design（Arts \＆Design <br> Criticism）OR <br> HDA 494：Public Practice：Engagement \＆Community OR <br> Select Herberger Institute Design or Arts historical studies course with non－Western focus | 3 | $\square$ |  | Grade of C | －Complete First－Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Complete MAT 142 or higher by end of semester 3 <br> －Historical \＆Theoretical Coursework：Refer to focus area list for course selection <br> －Minimum 3.0 cumulative GPA required in focus area coursework <br> －Minimum 2．0 ASU cumulative GPA <br> －Non－Western historical studies core course list available at the end of this major map． |
| Second Language 201： | 4 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative（SQ）： | 4 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L）： | 3 | $\square$ |  |  |  |
| TERM FOUR：48－61 CREDIT HOURS |  |  |  |  |  |
| Complete 1 Core Course： <br> HDA 294：Creativity and Innovation in the Arts OR <br> HDA／ARA 394：Writing about the Arts \＆Design（Arts \＆Design <br> Criticism）OR <br> HDA 494：Public Practice：Engagement \＆Community OR <br> Select Herberger Institute Design or Arts historical studies course with non－Western focus | 3 | $\square$ |  | Grade of C | －Historical \＆Theoretical Coursework：Refer to focus area list for course selection． <br> －Minimum 3.0 cumulative GPA required in focus area coursework <br> －Minimum 2．0 ASU cumulative GPA <br> －Complete Second Language 101 and 102 by the end of semester 4. <br> －Non－Western historical studies core course list available at the end of this major map． |
| Second Language 202： | 4 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative or General（SQ／SG）： | 4 | $\square$ |  | Grade of C |  |
| Humanities／Fine Arts \＆Design（HU）： | 3 | $\square$ |  |  |  |
| TERM FIVE：62－76 CREDIT HOURS |  |  |  |  |  |
| Complete 1 Core Course： <br> HDA 294：Creativity and Innovation in the Arts OR <br> HDA／ARA 394：Writing about the Arts \＆Design（Arts \＆Design <br> Criticism）OR <br> HDA 494：Public Practice：Engagement \＆Community OR <br> Select Herberger Institute Design or Arts historical studies course with non－Western focus | 3 | 区 |  | Grade of C | －＊Historical \＆Theoretical Coursework：Refer to focus area list for course selection． <br> －Minimum 3.0 cumulative GPA required in focus area coursework <br> －Minimum 2．0 ASU cumulative GPA <br> －Non－Western historical studies core course list available at the end of this major map． |
| ＊Upper Division Historical \＆Theoretical Arts Studies Course： | 3 | 区 |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Awareness Area－Global（G）， Historical（H）OR Cultural Diversity in the US（C）： | 3 | $\square$ |  | Grade of C |  |
| Humanities／Fine Arts \＆Design（HU）AND Awareness Area－Global （G），Historical（H）OR Cultural Diversity in the US（C）： | 3 | $\square$ |  |  |  |
| Elective： | 3 | $\square$ |  |  |  |
| TERM SIX：77－91 CREDIT HOURS |  |  |  |  |  |
| THP 352：Arts Entrepreneurship | 3 | 区 |  | Grade of C | －＊Historical \＆Theoretical Coursework：Refer to focus area list for course selection． <br> －Minimum 3.0 cumulative GPA required in focus area coursework <br> －Minimum 2．0 ASU cumulative GPA |
| ＊Upper Division Historical \＆Theoretical Arts Studies Course： | 3 | 区 |  | Grade of C |  |
| ＊Upper Division Historical \＆Theoretical Arts Studies Course： | 3 | 区 |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS）： | 3 | $\square$ |  | Grade of C |  |
| Upper Division Humanities／Fine Arts \＆Design（HU）or Social／Behavioral Science（SB）： | 3 | 区 |  |  |  |

Major Map ：The Arts－Bachelor of Arts（B．A．）
（Focus area：Historical and Theoretical Studies in the Arts） Herberger Institute for Design and the Arts｜Catalog Year：2011－2012

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN：92－106 CREDIT HOURS |  |  |  |  |  |
| ＊Upper Division Capstone Thesis or Independent Research Project： | 3 | 区 |  | Grade of C | －＊Historical \＆Theoretical Coursework：Refer to focus area list for course selection． <br> －＊＊Historical Related Studies：Refer to historical related studies list for course selection． <br> －Minimum 3.0 cumulative GPA required in focus area coursework <br> －Minimum 2．0 ASU cumulative GPA |
| ＊Upper Division Historical \＆Theoretical Arts Studies Course： | 3 | 区 |  | Grade of C |  |
| ＊＊Upper Division Historical Related Studies： | 3 | 区 |  | Grade of C |  |
| ＊Upper Division Historical \＆Theoretical Arts Studies Course： | 3 | 区 |  |  |  |
| Upper Division Elective： | 3 | 区 |  |  |  |
| TERM EIGHT：107－120 CREDIT HOURS |  |  |  |  |  |
| ＊Upper Division Capstone Thesis or Independent Research Project： | 3 | 区 |  | Grade of C | －＊Historical \＆Theoretical Coursework：Refer to focus area list for course selection． <br> －＊＊Historical Related Studies：Refer to historical related studies list for course selection． <br> －Minimum 3.0 cumulative GPA required in focus area coursework <br> －Minimum 2．0 ASU cumulative GPA |
| ＊Upper Division Historical \＆Theoretical Arts Studies Course： | 3 | 区 |  | Grade of C |  |
| ＊＊Upper Division Historical Related Studies： | 3 | 区 |  | Grade of C |  |
| Upper Division Literacy and Critical Inquiry（L）： | 3 | 区 |  |  |  |
| Elective： | 2 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total UD Hours <br> $($ minimum 45 $)$ | Cumulative GPA <br> $(2.00$ minimum $)$ | Total Hrs at ASU <br> $($ minimum 30） | Resident Credit for Academic <br> Recognition（minimum 56） | Total Comm．College Hrs． <br> （maximum 64） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements： Literacy and Critical Inquiry（L） Mathematical Studies（MA） Computer／Statistics／Quantitative applications（CS） Humanities，Fine Arts，and Design（HU） Social and Behavioral Sciences（SB） Natural Science－Quantitative（SQ） Natural Science－General（SG）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）
－Global Awareness（G）
－Historical Awareness（H）
－First－Year Composition

Historical and Theoretical Arts Studies（must include coursework from all 4 disciplines：ARS，DCE，MHL，THE； 2 non－western courses）： 24 hours（18 upper division）

AME 494 History and Analysis of Media Arts
AME 494／598 Media Theory＊
ARA 202 Understanding Photographs
ARA 394 Art Guides：Community Engagement and Learning in the Art Museum
ARA 498 Photography and Language
ARS 101 Art from Prehistory Through Middle Ages
ARS 102 Art from Renaissance to Present
ARS 3xx／4xx Art History Coursework
ARS 458 Critical Theories in the Visual Arts
DCE 201 Dance in World Cultures
DCE 301 Philosophy and Criticism of Dance
DCE 302 Cross－Cultural Dance Studies
DCE 300 Moving Histories
FMP 250 Sex and Violence in Film and Television：An Ethics Survey
MHL 140 Music as Culture
MHL 341 Music History I
MHL 342 Music History II
MHL 3xx／4xx Music History Coursework，such as：
MHL 394 Philosophies of Music
MHL 394 Music and Film
MHL 494 Gender and Music
MHL 494 Historiography

## Foreign Language（not American sign language）： 16 hours

Sixteen hours in one language or demonstrated proficiency．
Language proficiency is important due to the vast amount of arts research available in languages other than English．

Capstone Thesis or Independent Research Project：
6 hours（ 6 upper division）
Final synthesis project．Determined in consultation with faculty mentor．

MTC 125 Basic Music Theory
MTC 221 Music Theory： $18^{\text {th }}$ Century
MTC 222 Music Theory： $19^{\text {th }}$ Century
MTC 223 Music Theory： $20^{\text {th }}$ Century
THE 322 History of Theatre
THE 403 Independent Film
THE 404 Foreign Film
THE 405 Film Great Performers and Directors；multiple topics
THE 422 Latina and Latino Theatre
THE 423 African American Theatre
THE 424 Trends in Theatre for Youth
THE 426 Theatre of the Americas
THP 320 Acting：Solo and Collaborative Performance
THP 482 Theatre for Social Change
THE 494 ＊Theatre and Performance Studies＊

Historical Related（must include historical or theoretical courses in other disciplines）：
6 hours（ 6 upper division）
African／African American Studies
American Indian Studies
Anthropology
Architecture
Chicano／a Studies
Design
English
History
Literature
Philosophy
Religious Studies
Women＇s Studies

Major Map: The Arts - Bachelor of Arts (B.A.) (Focus area: Individualized Track) Herberger Institute for Design and the Arts | Catalog Year: 2011-2012

|  |  |  | Competed Transfer Pathway:$\square$ MAPP $\square$ TAG $\quad \square$ ATP $\square$ None |  | Completed General Education: $\square$ AGEC $\square \mathrm{IGETC} / \mathrm{CSUGE} \square$ None |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title (courses in bold/shading are critical courses) | Hrs. | Upper Division | Transfer Course/Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \\ & \hline \end{aligned}$ | Additional Critical Requirement Notes |
| TERM ONE: 0-16CREDIT HOURS |  |  |  |  |  |
| HDA 194: ASU Herberger Institute Experience | 1 | $\square$ |  |  | - ASU 101 is for ASU freshman students only Not required of transfer students <br> - SAT or ACT (or TOEFL) score determines placement in first-year composition course <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - Complete First-Year Composition requirement by the end of semester 3 <br> - Complete Math requirement, MAT 142 or higher, by end of semester 3 <br> - Meet with a Herberger Institute advisor to work on curriculum proposal process. Petition should be submitted by term 4 . |
| AME 194: Topics in Media Arts and Digital Culture | 3 | $\square$ |  | Grade of C |  |
| Focus Area Course | 3 | $\square$ |  |  |  |
| ENG 101 or 102: First-Year Composition or ENG 105: Advanced First-Year Composition or ENG 107 or 108: English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| MAT 142: College Mathematics (MA) | 3 | $\square$ |  |  |  |
| Social \& Behavioral Science (SB) AND Cultural Diversity in the US (C), Global Awareness (G) OR Historical Awareness (H) | 3 | $\square$ |  |  |  |
| TERM TWO: 17-31 CREDIT HOURS |  |  |  |  |  |
| Complete 1 Core Course: <br> HDA 294: Creativity and Innovation in the Arts OR <br>  <br> Design Criticism) OR <br> HDA 494: Public Practice: Engagement \& Community OR Select Herberger Institute Design or Arts historical studies course with non-Western focus | 3 | $\square$ |  | Grade of C | - Complete First-Year Composition requirement by the end of semester 3 <br> - Complete Math requirement, MAT 142 or higher, by end of semester 3 <br> - Meet with a Herberger Institute advisor to work on curriculum proposal process. Petition should be submitted by term 4 . <br> - Non-Western historical studies course list available at the end of this major map. |
| Focus Area Course | 3 | $\square$ |  | Grade of C |  |
| Elective | 3 | $\square$ |  |  |  |
| ENG 101 or 102: First-Year Composition ENG 105: Advanced First-Year Composition ENG 107 or 108: English for Foreign Students | 3 | $\square$ |  |  |  |
| Social \& Behavioral Science (SB) AND Cultural Diversity in the US (C), Global Awareness (G) OR Historical Awareness (H) | 3 | $\square$ |  |  |  |
| TERM THREE: 32-47 CREDIT HOURS |  |  |  |  |  |
| Complete 1 Core Course: <br> HDA 294: Creativity and Innovation in the Arts OR <br>  <br> Design Criticism) OR <br> HDA 494: Public Practice: Engagement \& Community OR Select Herberger Institute Design or Arts historical studies course with non-Western focus | 3 | $\square$ |  | Grade of C | - Complete First-Year Composition requirement by the end of semester 3 <br> - Complete Math requirement, MAT 142 or higher, by end of semester 3 <br> - Meet with a Herberger Institute advisor to work on curriculum proposal process. Petition should be submitted by term 4 . <br> - Non-Western historical studies course list available at the end of this major map. |
| Focus Area Course | 3 | $\square$ |  | Grade of C |  |
| Focus Area Course | 3 | $\square$ |  |  |  |
| Natural Science Quantitative (SQ) | 4 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FOUR: 48-63 CREDIT HOURS |  |  |  |  |  |
| Complete 1 Core Course: <br> HDA 294: Creativity and Innovation in the Arts OR <br>  <br> Design Criticism) OR <br> HDA 494: Public Practice: Engagement \& Community OR <br> Select Herberger Institute Design or Arts historical studies course with non-Western focus | 3 | $\square$ |  | Grade of C | - Meet with a Herberger Institute advisor to work on curriculum proposal process. Petition should be submitted by term 4. <br> - Non-Western historical studies course list available at the end of this major map. |
| Focus Area Course: Historical or Theoretical Arts Knowledge | 3 | $\triangle$ |  | Grade of C |  |
| Focus Area Course | 3 | $\square$ |  |  |  |
| Focus Area Course | 3 | $\square$ |  | Grade of C |  |
| Natural Science Quantitative (SQ) or General (SG) | 4 | $\square$ |  |  |  |
| TERM FIVE: 64-78 CREDIT HOURS |  |  |  |  |  |
| Complete 1 Core Course: <br> HDA 294: Creativity and Innovation in the Arts OR <br> HDA/ARA 394: Writing about the Arts \& Design (Arts \& Design Criticism) OR <br> HDA 494: Public Practice: Engagement \& Community OR <br> Select Herberger Institute Design or Arts historical studies course with non-Western focus | 3 | 区 |  | Grade of C | - Non-Western historical studies course list available at the end of this major map. |
| Focus Area Course: Historical or Theoretical Arts Knowledge | 3 | 区 |  | Grade of C |  |
| Focus Area Course | 3 | $\square$ |  | Grade of C |  |
| Literacy and Critical Inquiry (L) | 3 | $\square$ |  |  |  |
| Computer Literacy (CS) | 3 | $\square$ |  |  |  |

Major Map：The Arts－Bachelor of Arts（B．A．）
（Focus area：Individualized Track）
Herberger Institute for Design and the Arts｜Catalog Year：2011－2012

| Course Subject and Title （courses in bold／shading are critical courses） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX：79－93 CREDIT HOURS |  |  |  |  |  |
| THP 352：Arts Entrepreneurship | 3 | 区 |  | Grade of C |  |
| Focus Area Course：Historical or Theoretical Arts Knowledge | 3 | 区 |  | Grade of C |  |
| Focus Area Course | 3 | $\square$ |  |  |  |
| Upper division Literacy and Critical Inquiry（L） | 3 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）OR Historical Awareness（H）， Focus Area Course or Elective | 3 | 区 |  |  |  |
| TERM SEVEN：94－108 CREDIT HOURS |  |  |  |  |  |
| Focus Area Course：Historical or Theoretical Arts Knowledge | 3 | 区 |  |  | －Capstone experience is determined in consultation with faculty advisor and may include an internship， study abroad，or independent research project． |
| Focus Area Course | 3 | 区 |  |  |  |
| Focus Area Course | 3 | 囚 |  |  |  |
| Focus Area：Arts Capstone Experience | 3 | 区 |  |  |  |
| Focus Area Course or Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT：108－120 CREDIT HOURS |  |  |  |  |  |
| Focus Area Course | 3 | 囚 |  |  | －Capstone experience is determined in consultation with faculty advisor and may include an internship， study abroad，or independent research project． |
| Focus Area Course | 3 | 区 |  |  |  |
| Focus Area：Arts Capstone Experience | 3 | 囚 |  |  |  |
| Focus Area Course or Elective | 3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum） | Total UD Hours <br> （minimum 45） | Cumulative GPA <br> （2．00 minimum） | Total Hrs at ASU <br> （ minimum 30） | Resident Credit for Academic <br> Recognition（minimum 56） | Total Comm．College Hrs． <br> （maximum 64） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
－Literacy and Critical Inquiry（L）
－Mathematical Studies（MA）
－Computer／Statistics／Quantitative applications（CS）
－Humanities，Fine Arts，and Design（HU）
－Social and Behavioral Sciences（SB）
－Natural Science－Quantitative（SQ）
－Natural Science－General（SG）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）
－Global Awareness（G）
－Historical Awareness（H）
－First－Year Composition

Major Map ：The Arts－Bachelor of Arts（B．A．） （Focus area：Digital Culture）<br>Herberger Institute for Design and the Arts｜Catalog Year：2011－2012

|  |  |  | Competed Transfer Pathway： |  | Completed General Education： $\square$ AGEC $\square$ IGETC／CSUGE $\square$ None |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| TERM ONE：0－16 CREDIT HOURS |  |  |  |  |  |
| HDA 194：The ASU Herberger Institute Experience | 1 | $\square$ |  | Grade of C | －ASU 101 is for ASU freshman students only．Not required of transfer students <br> －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> －Digital Culture coursework：Refer to focus area list for course selection． <br> －Minimum 3.0 cumulative GPA required in Digital Culture coursework <br> －Minimum 2．0 ASU cumulative GPA |
| ENG 101 and 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 and 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| AME 194：Introduction to Digital Culture | 3 | $\square$ |  | Grade of C |  |
| Digital Media： | 3 | $\square$ |  | Grade of C |  |
| MAT 210：Brief Calculus（MA） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts，Design（HU）with Awareness Area－ Global（G）and Historical（H）： | 3 | $\square$ |  |  |  |
| TERM TWO：17－31 CREDIT HOURS |  |  |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 and 108：English for Foreign Students | 3 | $\square$ |  | Grade of C | －Digital Culture coursework：Refer to focus area list for course selection． <br> －Minimum 3.0 cumulative GPA required in Digital Culture coursework <br> －Minimum 2．0 ASU cumulative GPA <br> －Non－Western historical studies course list available at the end of this major map． |
| Complete 1 Core Course： <br> HDA 294：Creativity and Innovation in the Arts OR <br> ARA 394：Writing about the Arts（Arts \＆Design <br> Criticism）OR <br> HDA 494：Public Practice：Engagement \＆Community OR Select Herberger Institute Design or Arts historical studies course with non－Western focus | 3 <br>  <br>  | $\square$ |  | Grade of C |  |
| Digital Culture Studies： | 3 | $\square$ |  | Grade of C |  |
| Social and Behavioral Sciences（SB）with Awareness Area－ Cultural Diversity（C）： | 3 | $\square$ |  |  |  |
| Computer／Statistics／Quantitative applications（CS）： | 3 | $\square$ |  |  |  |
| TERM THREE：32－47 CREDIT HOURS |  |  |  |  |  |
| Complete 1 Core Course： <br> HDA 294：Creativity and Innovation in the Arts OR <br> ARA 394：Writing about the Arts（Arts \＆Design Criticism） OR <br> HDA 494：Public Practice：Engagement \＆Community OR Select Herberger Institute Design or Arts historical studies course with non－Western focus | 3 <br>  <br>  | $\square$ |  | Grade of C | －Complete First－Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or 105 <br> －Digital Culture coursework：Refer to focus area list for course selection． <br> －Minimum 3.0 cumulative GPA required in Digital Culture coursework <br> －Minimum 2．0 ASU cumulative GPA <br> －Non－Western historical studies course list available at the end of this major map． |
| Digital Culture Studies： | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative（SQ）： | 4 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L）： | 3 | $\square$ |  |  |  |
| Social and Behavioral Sciences（SB）： | 3 | $\square$ |  |  |  |
| TERM FOUR：48－63 CREDIT HOURS |  |  |  |  |  |
| Complete 1 Core Course： <br> HDA 294：Creativity and Innovation in the Arts OR <br> ARA 394：Writing about the Arts（Arts \＆Design Criticism） OR <br> HDA 494：Public Practice：Engagement \＆Community OR Select Herberger Institute Design or Arts historical studies course with non－Western focus | 3 | $\square$ |  | Grade of C | －Digital Culture coursework：Refer to focus area list for course selection． <br> －Minimum 3.0 cumulative GPA required in Digital Culture coursework <br> －Minimum 2．0 ASU cumulative GPA <br> －Non－Western historical studies course list available at the end of this major map． |
| Digital Culture Studies： | 3 | $\square$ |  | Grade of C |  |
| Digital Media： | 3 | $\square$ |  | Grade of C |  |
| Natural Science－Quantitative or General（SQ／SG）： | 4 | $\square$ |  |  |  |
| Humanities，Fine Arts，Design（HU）： | 3 | $\square$ |  |  |  |
| TERM FIVE：64－78 CREDIT HOURS |  |  |  |  |  |
| Complete 1 Core Course： <br> HDA 294：Creativity and Innovation in the Arts OR <br> ARA 394：Writing about the Arts（Arts \＆Design Criticism）OR <br> HDA 494：Public Practice：Engagement \＆Community OR <br> Select Herberger Institute Design or Arts historical studies course with non－Western focus | 3 | 区 |  | Grade of C | －Digital Culture coursework：Refer to focus area list for course selection． <br> －Minimum 3.0 cumulative GPA required in Digital Culture coursework <br> －Minimum 2．0 ASU cumulative GPA <br> －Non－Western historical studies course list available at the end of this major map． |
| Digital Culture Studies： | 3 | $\square$ |  | Grade of C |  |
| Digital Media： | 3 | $\square$ |  | Grade of C |  |
| Upper Division Digital Culture Studies： | 3 | 区 |  | Grade of C |  |
| Related Digital Culture： | 3 | $\square$ |  | Grade of C |  |
| TERM SIX：79－93 CREDIT HOURS |  |  |  |  |  |
| THP 352：Arts Entrepreneurship | 3 | 区 |  | Grade of C | －Digital Culture coursework：Refer to focus area list for course selection． <br> －Minimum 3.0 cumulative GPA required in Digital Culture coursework <br> －Minimum 2．0 ASU cumulative GPA |
| Upper Division Digital Culture Studies： | 3 | 区 |  | Grade of C |  |
| Upper Division Digital Culture Studies： | 3 | 区 |  | Grade of C |  |
| Upper Division Digital Media： | 3 | $\square$ |  | Grade of C |  |
| Upper Division Humanities／Fine Art（HU）or Social／Behavioral Science（SB）： | 3 | 区 |  |  |  |

Major Map ：The Arts－Bachelor of Arts（B．A．） （Focus area：Digital Culture）<br>Herberger Institute for Design and the Arts｜Catalog Year：2011－2012

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN：94－108 CREDIT HOURS |  |  |  |  |  |
| Upper Division Capstone Experience： | 3 | 区 |  | Grade of C | －Digital Culture coursework：Refer to focus area list for course selection． <br> －Minimum 3.0 cumulative GPA required in Digital Culture coursework <br> －Minimum 2．0 ASU cumulative GPA |
| Upper Division Digital Culture Studies ： | 3 | 区 |  | Grade of C |  |
| Upper Division Digital Media： | 3 | 区 |  | Grade of C |  |
| Historical and Theoretical Studies： | 3 | 区 |  | Grade of C |  |
| Upper Division Literacy and Critical Inquiry（L）： | 3 | 区 |  |  |  |
| TERM EIGHT：109－120 CREDIT HOURS |  |  |  |  |  |
| Upper Division Digital Culture Studies： | 3 | 区 |  | Grade of C | －Digital Culture coursework：Refer to focus area list for course selection． <br> －Minimum 3.0 cumulative GPA required in Digital Culture coursework <br> －Minimum 2．0 ASU cumulative GPA |
| Upper Division Digital Media： | 3 | 区 |  | Grade of C |  |
| Upper Division Historical and Theoretical Studies：： | 3 | 区 |  | Grade of C |  |
| Upper Division Capstone Experience： | 3 | 区 |  | Grade of C |  |

## Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total UD Hours <br> （minimum 45） | Cumulative GPA <br> $(2.00$ minimum $)$ | Total Hrs at ASU <br> （minimum 30） | Resident Credit for Academic <br> Recognition（minimum 56） | Total Comm．College Hrs． <br> （maximum 64） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：

| $\circ$ | Literacy and Critical Inquiry（L） |
| :--- | :--- |
| $\circ$ | Mathematical Studies（MA） |
| $\circ$ | Computer／Statistics／Quantitative applications（CS） |
| $\circ$ | Humanities，Fine Arts，and Design（HU） |
| $\circ$ | Social and Behavioral Sciences（SB） |
| $\circ$ | Natural Science－Quantitative（SQ） |

－Natural Science－General（SG）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）
－Global Awareness（G）
－Historical Awareness（H）
－First－Year Composition

Additional Notes：Focus Area Course List

| Digital Culture Studies： 27 hours（15 upper division）＊ | Digital Media： 15 hours（6 upper division；must include coursework from both areas）＊ | Historical \＆Theoretical： 6 hours（3 upper division； select 2 different disciplines）＊ |
| :---: | :---: | :---: |
| AME 194 Introduction to Digital Culture is a pre－ requisite for all courses below． | Media Arts and Design | ENG 394 Videogame Theory |
| AME 194 Computational Thinking for Digital Culture and Media Arts | ART 194 Digital Art \＆Culture | AME 494 History \＆Analysis of Media Arts |
| AME／ART 294 Intro to Interactive Environments | ART 294 The Still Image in Digital Culture | ARA 202 Understanding Photographs |
| DSC 294 Media Editing | FMP 294 Introduction to Animation | ARA 498 Photography \＆Language |
| ART 294 3D Tools | MUE 294 Open Minds Digital Ears | ARS 102 Art from Renaissance to Present |
| AME 294 Programming for Media Arts | MUE 394 Advanced Interactive Sound | ARS 438 Art of the $20{ }^{\text {th }}$ Century I |
| DCE 294 Hybrid Action：Physical Intelligence in Digital Culture | FMP 394 Non－linear Editing | ARS 439 Art of the $20^{\text {th }}$ Century II |
| ANP／AME 394 How to Build a Digital－Physical System | MUE 394 Performing in Digital \＆Hybrid Music Groups | ARS 294 Art \＆Television |
| DSC 394 Digital Modeling | ANP 494 Design by Algorithm | ARS 460 Art Now |
| AME／PSY 394 Memory and Cognition | ANP 494 Designing Hybrid Spaces | ARS 394／494 $20^{\text {th }}$ Century Art History |
| AME 394 Collaborative Projects in Digital Culture | ART 494 Visualizing and Prototyping | DCE 401 Dance History |
| AME 394 Compositional \＆Computation Principles for Media Arts | Media Engineering | IAP $30520^{\text {th }} / 21^{\text {st }}$ Century Art，Media，Technology \＆ Performance |
| ANP 394 Digital Fabrication | CSE 394 Data Structures，Analysis \＆Retrieval | THE 405 Film Great Performers \＆Directors；multiple topics |
| ANP 494 Digital Ecologies：Parametric Systems Design | CEE 394 Signal Analysis for Digital Culture | MHL 440 Music Since 1900 |
| AME 494 Animating Virtual Worlds | CSE 394 Graphics \＆Information Visualization for Digital Culture | MHL 394／494 $20^{\text {th }}$ Century Music History |
| ART／AME 494 Media Installations | CEE／CSE 494 Information Analysis \＆Search for Digital Culture | THE 320 History of Theatre I |
| AME 494 Integrated System Development for Digital Culture | EGR 499 Music and Engineering | THE 321 History of Theatre II |
|  |  | THE 322 Theatre History \＆Culture |
| Related Digital Culture： 6 hours（3 upper division）＊ | Capstone Experience：（6 upper division）＊ | THE 403 Independent Film |
| THP 294 Writing \＆Story Development for Interactive Gaming | Internship，thesis or other independent research project．Final synthesis project． <br> Determined in consultation with faculty mentor． | THE 404 Foreign Film |
| EDT 329 Games，Simulations \＆Virtual Environments |  | THE $49420{ }^{\text {th }}$ Century Theatre History |
| ASB 328 Rules，Games \＆Society |  | THP 482 Theatre for Social Change |

ASB 344 Technology \＆Society

ENG 394 Social Media \＆Digital Cultures
ENG 394 Writing in Cyberspace
ART 394 Digital Ethnography in Virtual Worlds
AME 394 Media Theory
EDT 431 Computer Gaming Learning \＆Literacy
ASB 430 Social Simulation
MCO 435 Media 2．0 Social Media
＊Students in the Digital Culture focus can petition to replace three credits per digital culture category（digital culture studies，digital media，related digital culture，historical and theoretical，capstone）up to a maximum of 12 replacement credits．Replacement credits must be related to digital culture work and may be achieved through courses offered by any unit of ASU including Polytechnic，West（IAP），and FMS．


## 4 UNIVERSITY

## 2011-2012 Major Map <br> Dance, BFA

Herberger Institute for Design and the Arts
Campus:Tempe
FADANBFA

| Term 1 0-16 Credit Hours Critical course signified by 9 | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| :---: | :---: | :---: | :---: |
| Milestone: School of Dance students must successfully complete an entrance interview into the major before enrolling at ASU. |  |  | - See below for entrance Milestone, required for completion prior to Term 1 <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. Dance majors take DCE 170 to complete this requirement. <br> - One Personal Movement Practices course is required this semester, but students may take an additional Personal Movement Practices course in this semester for general elective credit if their schedule allows. |
| 4 DCE 170: First-Year Seminar I | 1 | Y |  |
| 4 DCE 130: First-Year Movement Practices I | 2 | C |  |
| DCE 134: Postmodern Contemporary I OR DCE 135: Contemporary Ballet I OR DCE 194: Special Topics | 2-3 | C |  |
| 4. DCE 160: First-Year Creative Practices I | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| Elective | 2 |  |  |
| Term hours subtotal: | 16-17 |  |  |


| Term 2 17-32 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4. DCE 171: First-Year Seminar II | 1 | Y | - One Personal Movement Practices course is required this semester, but students may take an additional Personal Movement Practices course in this semester for general elective credit if their schedule allows. |
| 4 DCE 131: First-Year Movement Practices II | 2 | C |  |
| DCE 134: Postmodern Contemporary I OR <br> DCE 135: Contemporary Ballet I OR <br> DCE 234: Postmodern Contemporary II OR <br> DCE 235: Contemporary Ballet II OR <br> DCE 194: Special Topics | 2-3 | C |  |
| 4 DCE 161: First-Year Creative Practices II | 3 | C |  |
| DCE 201: Dance, Culture, and Global Contexts. (HU \& G) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Elective | 2 |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 3 33-47 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| 4 DCE 270: Second-Year Seminar I | 1 | Y | - One Personal Movement Practices course is required this semester, but students may take an additional Personal Movement Practices course in this semester for general elective credit if their schedule allows. |
| 4 DCE 230: Second-Year Movement Practices I | 2 | C |  |
| DCE 134: Postmodern Contemporary I OR <br> DCE 135: Contemporary Ballet I OR <br> DCE 194: Special Topics OR <br> DCE 234: Postmodern Contemporary II OR <br> DCE 235: Contemporary Ballet II OR <br> DCE 294: Special Topics OR <br> DCE 494: Tech/Theory Modern | 2-3 | C |  |
| DCE 260: Second-Year Creative Practices I | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |



| Term 8 | 106-120 Credit Hours | Hours | Minimum <br> Grade |
| :--- | :--- | :---: | :---: |
| DCE 494: Fourth-Year Seminar | 1 | Notes |  |
| DCE 461: Transition Project II | 2 | C |  |
| DAH OR DAN OR DCE Upper Division Elective | 3 | C |  |
| Humanities, Fine Arts and Design (HU) OR | 3 |  |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |
| Upper Division Elective | Term hours subtotal: | 15 |  |
| Elective |  |  |  |

## Notes:

- Prior to term 1:

Milestone 1: All students who wish to enroll in an undergraduate dance degree program are required to pass an interview.

- Prospective students: Interviews take place in February. Students who do not pass the interview must participate in the following fall semester Enrolled Studen Interview. These students will take non-major technique classes to help prepare for this interview.
- Enrolled (current) students: Interviews take place February and November. Students who do not pass the interview must participate in the Enrolled Student Interview in the following semester. These students will take non-major technique classes to help prepare for this interview.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> Dance (Dance Education), BFA

Herberger Institute for Design and the Arts
Campus:Tempe
FADANEBFA

| Term 1 0-14 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Milestone: School of Dance students must successfully complete an entrance interview into the major before enrolling at ASU. |  |  | - See below for entrance Milestone, required for completion prior to Term 1 <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. Dance majors complete DCE 170 to fulfill this requirement. <br> - One Personal Movement Practices course is required this semester, but students may take an additional Personal Movement Practices course in this semester for general elective credit if their schedule allows. |
| 4 DCE 170: First-Year Seminar I | 1 | Y |  |
| 4 DCE 130: First-Year Movement Practices I | 2 | C |  |
| DCE 134: Postmodern Contemporary I OR DCE 135: Contemporary Ballet I OR DCE 194: Special Topics | 2-3 | C |  |
| 4 DCE 160: First-Year Creative Practices I | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| Term hours subtotal: | 14-15 |  |  |


| Term 2 15-31 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 DCE 171: First-Year Seminar II | 1 | Y | - One Personal Movement Practices course is required this semester, but students may take an additional Personal Movement Practices course in this semester for general elective credit if their schedule allows. |
| 4 DCE 131: First-Year Movement Practices II | 2 | C |  |
| DCE 134: Postmodern Contemporary I OR DCE 135: Contemporary Ballet I OR DCE 194: Special Topics | 2-3 | C |  |
| 4 DCE 161: First-Year Creative Practices II | 3 | C |  |
| DCE 201: Dance, Culture, and Global Contexts. (HU \& G) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR GCU 194: U.S. and Arizona for Aspiring Elementary Educators | 3 |  |  |
| Term hours subtotal: | 17-18 |  |  |
| Term 3 32-46 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| 4 DCE 270: Second-Year Seminar I | 1 | Y | - Must complete DCE 201 by the end of term 3 <br> - One Personal Movement Practices course is required this semester, but students may take an additional Personal Movement Practices course in this semester for general elective credit if their schedule allows. <br> - Teachers College requirement: |
| 4 DCE 230: Second-Year Movement Practices I | 2 | C |  |
| DCE 134: Postmodern Contemporary I OR <br> DCE 135: Contemporary Ballet I OR <br> DCE 194: Special Topics OR <br> DCE 234: Postmodern Contemporary II OR <br> DCE 235: Contemporary Ballet II OR <br> DCE 294: Special Topics OR <br> DCE 494: Tech/Theory Modern | 2-3 | C |  |
| 1 DCE 260: Second-Year Creative Practices I | 3 | C | - Teachers College requirement: Must complete a Natural Science |
| Natural Science - Quantitative (SQ) | 4 |  | (SQ or SG) by end of term 4 |
| Computer/Statistics/Quantitative Applications (CS) OR DCE 340: Media for Dance (CS) | 3 |  | - Teachers College requirement: <br> Must complete Intent to Progress |

1 Complete First-Year Composition requirement.
Complete Mathematics (MA) requirement.

Form (meet with Teachers College advisor to complete this form)

- Teachers College requirement: apply for DPS fingerprint clearance card

| Term 4 47 - 64 Credit Hours Critical course signified by | Hours | Minimum <br> Grade |  |
| :--- | :---: | :---: | :---: |
| DCE 271: Second-Year Seminar II | 1 | Y |  |
| DCE 294: 2nd-Yr Movement Practices II | 2 | C |  |
| DCE 134: Postmodern Contemporary I OR <br> DCE 135: Contemporary Ballet I OR <br> DCE 194: Special Topics OR <br> DCE 234: Postmodern Contemporary II OR <br> DCE 235: Contemporary Ballet II OR <br> DCE 294: Special Topics OR <br> DCE 494: Tech/Theory Modern | $2-3$ |  |  |
| DCE 261: Second-Year Creative Practices II |  | C |  |
| DCE 354: Creative Approaches to Teaching Dance I | 3 | C |  |
| DCE 300: Moving Histories (HU) | Term hours subtotal: | $18-19$ | C |
| Natural Science - General (SG) OR |  |  |  |
| Natural Science - Quantitative (SQ) | 3 | C |  |

- One Personal Movement Practices course is required this semester, but students may take an additional Personal
Movement Practices course in this semester for general elective credit if their schedule allows.
- Teachers College requirement: Must complete a Natural Science (SQ or SG) by end of term 4
- Teachers College requirement: attend Teachers College Enrollment Workshop
- Teachers College requirement: submit copy of DPS fingerprint clearance card to Teachers College (Farmer 120)

| Term 5 65-78 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| DCE 370: Third-Year Seminar I |  | 1 | Y | - One Personal Movement Practices course is required this semester, but students may take an additional Personal Movement Practices course in this semester for general elective credit if their schedule allows. |
| DCE 394: 3rd-Yr Movement Practices |  | 2 | C |  |
| DCE 134: Postmodern Contemporary I OR <br> DCE 135: Contemporary Ballet I OR <br> DCE 194: Special Topics OR <br> DCE 234: Postmodern Contemporary II OR <br> DCE 235: Contemporary Ballet II OR <br> DCE 294: Special Topics OR <br> DCE 334: Technique and Theory of Modern Dance OR <br> DCE 335: Contemporary Ballet III OR <br> DCE 494: Tech/Theory Modern |  | 2-3 | C |  |
| DCE 360: Third-Year Creative Practices I |  | 3 | C |  |
| DCE 356: Creative Approaches to Teaching Dance II |  | 3 | C |  |
| DCE 301: Meaning in Motion (L or HU) |  | 3 | C |  |
|  | Term hours subtotal: | 14-15 |  |  |
| Term 6 79-94 Credit Hours |  | Hours | Minimum Grade | Notes |
| DCE 371: Third-Year Seminar II |  | 1 | Y | - Must complete DCE 401 by the end of term 6 |
| DCE 394: 3rd-Yr Movement Practices |  | 2 | C |  |
| DCE 394: 3rd-Yr Creative Practices |  | 3 | C |  |
| BLE 220: Foundations of Structured English Immersion |  | 3 | C |  |
| TEL 313: Educational Technology in the K-12 Curriculum |  | 3 | C |  |
| TEL 315: Child and Adolescent Development (L or SB) |  | 3 | C |  |
| SED 396: Field Experience I |  | 1 | C |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 7 95-110 Credit Hours |  | Hours | Minimum Grade | Notes |
| DCE 494: Fourth-Year Seminar |  | 1 | Y | - One Personal Movement Practices course is required this semester, but students may take an additional Personal Movement Practices course in this semester for general elective credit if their schedule allows. |
| DCE 134: Postmodern Contemporary I OR <br> DCE 135: Contemporary Ballet I OR <br> DCE 194: Special Topics OR <br> DCE 234: Postmodern Contemporary II OR <br> DCE 235: Contemporary Ballet II OR <br> DCE 294: Special Topics OR <br> DCE 334: Technique and Theory of Modern Dance OR <br> DCE 335: Contemporary Ballet III OR <br> DCE 494: Tech/Theory Modern |  | 2-3 | C |  |
| SED 397: Field Experience II |  | 1 | C |  |
| BLE 407: SEI for Secondary Students |  | 3 | C |  |


| RDG 323: Literacy Processes in Content Areas | 3 | C |  |
| :---: | :---: | :---: | :---: |
| Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 8 111-120 Credit Hours | Hours | Minimum Grade | Notes |
| DCE 494: Fourth-Year Seminar | 1 | Y | - Students who wish to be enrolled full time this term may register for SED 478 for 12 hours |
| SED 478: Student Teaching in the Secondary School | 9 | C |  |
| Term hours subtotal: | 10 |  |  |

## Notes:

- Prior to term 1:

Milestone 1: All students who wish to enroll in an undergraduate dance degree program are required to pass an interview.

- Prospective students: Interviews take place in February. Students who do not pass the interview must participate in the following fall semester Enrolled Studen Interview. These students will take non-major technique classes to help prepare for this interview.
- Enrolled (current) students: Interviews take place February and November. Students who do not pass the interview must participate in the Enrolled Student Interview in the following semester. These students will take non-major technique classes to help prepare for this interview.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Design Studies, BA

Herberger Institute for Design and the Arts
Campus:Tempe
ARDSNBA

| Term 1-16 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 HDA 194: ASU Herberger Institute Experience | 1 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. Design studies students complete HDA 194 or DSC 194 to fulfill this requirement. <br> - Discuss Freshman Design Elective options with advisor. <br> - Students interested in pursuing the Digital Culture concentration in Design Studies should view the major map for this program here: Design Studies (Digital Culture) Major Map. |
| 4 Freshman Design Elective | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  |  |
| Mathematics (MA) | 3 |  |  |
| Elective | 3 |  |  |
| 9. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 2 17-31 Credit Hours Critical course signified by 4 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 Freshman Design Elective | 3 | C | - Discuss Freshman Design Elective options with advisor. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Elective | 6 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by ${ }^{\text {! }}$ | Hours | Minimum Grade | Notes |
| Sophomore Design History | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Elective | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Complete Mathematics (MA) requirement. |  |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Minimum Grade | Notes |
| Sophomore Communication for Design | 3 | C |  |
| Sophomore General Design | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |


| Natural Science - Quantitative (SQ) OR | 4 |
| :--- | :--- |
| Natural Science - General (SG) | 4 |

Minimum 2.00 GPA ASU Cumulative.
Term hours subtotal: 16

| Term 5 64-78 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Upper Division Junior/Senior Communication for Design |  | 3 | C |  |
| Upper Division Junior/Senior Design History |  | 3 | C |  |
| Upper Division Junior/ Senior General Design |  | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Junior/Senior Communication for Design |  | 3 | C |  |
| Upper Division Junior/Senior Design History |  | 3 | C |  |
| Upper Division Junior/ Senior General Design |  | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Junior/Senior Communication for Design |  | 3 | C |  |
| Upper Division Junior/Senior Design History |  | 3 | C |  |
| Upper Division Junior/ Senior General Design |  | 3 | C |  |
| Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Junior/Senior Communication for Design |  | 3 | C |  |
| Upper Division Junior/Senior Design History |  | 3 | C |  |
| Upper Division Junior/ Senior General Design |  | 3 | C |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 12 |  |  |

- Sophomore List: Students must select one course from each of the following three categories
- Junior/Senior List: Students must select four courses from each of the following three categories

| Freshman Design Electives | Sophomore Communication for Design | Junior/ Senior General Design |
| :---: | :---: | :---: |
| AAD OR ADE OR ALA OR ANP OR APH OR ARP OR ATE OR AVC OR DSC OR GRA OR HUD OR IND OR INT OR LAA OR LAP OR LDE OR LNP OR LPH OR LTC OR PLA OR PUP Elective | COM 100: Introduction to Human | GRA 401: Creative Environment |
|  | Communication (SB) |  |
|  | COM 225: Public Speaking (L) | GRA 440: Finding Purpose |
|  |  | IND 344: Human Factors in Design |
|  | COM 230: Small Group Communication (SB) |  |
|  | COM 250: Introduction to Organizational | IND 354: Principles of Product Design |
|  | Communication (SB) | INT 320: Computer Modeling for Design |
|  | COM 259: Communication in Business and |  |
|  | the Professions | INT 394: Design and Human Behavior |
|  | COM 110: Elements of Interpersonal Communication (SB) | INT 394: Introduction to CAD |
|  |  | PUP 301: Introduction to Urban Planning (L) |
|  |  | PUP 420: Theory of Urban Design (HU) |

DSC 394: Principles of Retail Design

| Sophomore Design History | Sophomore General Design | Junior/ Senior Design History |
| :---: | :---: | :---: |
| ALA 100: Introduction to Environmental Design (HU \& H \& G) | ALA 102: Landscapes and Sustainability (HU \& G) | APH 300: World Architecture I/Western Cultures (HU \& H \& G) |
| DSC 101: Design Awareness (HU \& G) | ALA 236: Introduction to Computer Modeling (CS) AND DSC 236: Introduction to Computer Modeling (CS) | APH 305: Contemporary Architecture (HU \& H) |
| GRA 111: Graphic Design History I (HU) |  |  |
| GRA 112: Graphic Design History II | INT 121: Introduction to Computer Modeling for Interior Design (CS) | APH 313: History of Architecture I ((L or $\mathrm{HU}) \& \mathrm{G} \& \mathrm{H})$ |
| INT 111: Interior Design Issues and Theories (HU) | APH 294: Culture of Place | APH 314: History of Architecture II ((L or HU) \& G \& H) |
|  | GRA 225: Communication/Interaction Design Theory | APH 336: 20th-Century Architecture I (HU) |
|  |  | APH 337: 20th-Century Architecture II (HU) |
|  | IND 242. Materials and Design | LPH 310: History of Landscape Architecture ( $\mathrm{HU} \& \mathrm{H} \& \mathrm{G}$ ) |
|  | IND 243: Design for Ecology and Social Equity |  |
|  | INT 123: Introduction to Computer-Aided Design of Built Environments | LPH 311: Topics in Contemporary Landscape Architecture (HU) |
|  | INT 131. Design and Human Behavior (SB) | IND 316: 20th-Century Design I (HU \& H) |
|  |  | IND 317: 20th-Century Design II (HU \& H) |
|  | PUP 190: Sustainable Cities ((HU or SB) \& G) | INT 310: History of Interior Design I (HU \& H) |
|  | PUP 200: Cities in Cinema (HU \& H) |  |
|  | GRA 101: Designing Life | INT 311: History of Interior Design II (HU \& H) |
|  |  | PUP 363: History of Planning |
| Junior/ Senior Communication for Design |  |  |
| COM 312: Communication, Conflict, and Negotiation |  |  |
| ENG 301: Writing for the Professions (L) |  |  |
| MKT 394: Marketing |  |  |
| MKT 395: Essentials of Advertising and Marketing Communication |  |  |
| MKT 390: Essentials of Marketing |  |  |
| MKT 391: Essentials of Selling |  |  |
| TWC 301: General Principles of Multimedia Writing (L) |  |  |
| TWC 347: Written Communication for Managers (L) |  |  |
| TWC 351: Technical Writing and Editing |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum Cumulative GPA: 2.00 minimum Total hrs at ASU: 30 minimum Hrs Resident Credit for Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Design Studies (Design Management), BA <br> Herberger Institute for Design and the Arts <br> Campus:Tempe <br> ARDSNMBA

| Term 1 0-16 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. HDA 194: ASU Herberger Institute Experience | 1 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in |
| 4 Freshman Design Elective | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  | Mathematics course |
| Mathematics (MA) | 3 |  | - ASU 101 or College specific equivalent First Year Seminar |
| Elective | 3 |  | required of all freshman |
| 9. Minimum 2.00 GPA ASU Cumulative. |  |  | students. Design studies majors complete HDA 194 or DSC 194 |
| Term hours subtotal: | 16 |  | to fulfill this requirement. <br> - Discuss Freshman Design Elective options with advisor. |


| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 Freshman Design Elective | 3 | C | - Discuss Freshman Design Elective options with advisor. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Elective | 6 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| Sophomore Design History Course | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Elective | 3 |  |  |
| 4. Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| Sophomore Communication for Design Course | 3 | C |  |
| Sophomore General Design Course | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| $\begin{aligned} & \text { Natural Science - General (SG) OR } \\ & \text { Natural Science - Quantitative (SQ) } \end{aligned}$ | 4 |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: Academic Catalog Archive 201 | $\begin{gathered} 16 \\ 012 \end{gathered}$ |  |  |

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| Term 5 64-78 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Upper Division Junior Communication for Design Course |  | 3 | C |  |
| Upper Division Junior Design History Course |  | 3 | C |  |
| Upper Division Junior General Design Course |  | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Junior Communication for Design Course |  | 3 | C |  |
| Upper Division Junior Design History Course |  | 3 | C |  |
| Upper Division Junior General Design Course |  | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| Lower Division Senior List Design Studies Course |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Senior List Design Studies Course |  | 6 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| Lower Division Senior List Design Studies Course |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Senior List Design Studies Course |  | 6 | C |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 12 |  |  |

- Sophomore List: Students must select one course from each of the following three categories: (Individual courses cannot fulfill more than one category.)
- Junior List: Students must select two courses from each of the following three categories: (Individual courses cannot fulfill more than one category.)
- Senior List: Students must complete 18 credits. At least 12 credits must be Upper Division. (Individual courses cannot fulfill more than one category.)

| Senior List Upper division | Sophomore General Design | Junior Design History |
| :---: | :---: | :---: |
| ACC 382: Accounting and Financial Analysis | ALA 102: Landscapes and Sustainability (HU \& G) | APH 313: History of Architecture I ((L or HU) \& G \& H) |
| COM 312: Communication, Confl |  |  |
| Negotiation | ALA 236: Introduction to Computer Modeling (CS) | APH 314: History of Architecture II ((L or $\mathrm{HU}) \& \mathrm{G} \& \mathrm{H})$ |
| ECN 382: Managerial Economics |  | IND 316: 20th-Century Design I (HU \& H) |
|  | INT 121: Introduction to Computer Modeling for Interior Design (CS) |  |
|  | APH 294: Culture of Place | IND 317: 20th-Century Design II (HU \& H) |
| FIN 380: Personal Financial Management |  | INT 310: History of Interior Design I (HU \& H) |
| INT 471: Facilities Management | IND 242: Materials and Design |  |
| LES 380: Consumer Perspective of Business Law | GRA 225: Communication/Interaction Design Theory | INT 311: History of Interior Design II (HU \& H) |
| MGT 380: Management and Strategy for Nonmajors | IND 243: Design for Ecology and Social Equity | LPH 310: History of Landscape Architecture (HU \& H \& G) |
| MKT 390: Essentials of Marketing | INT 123: Introduction to Computer-Aided Design of Built Environments | PUP 363: History of Planning |
| MKT 391: Essentials of Selling | INT 131: Design and Human Behavior (SB) | APH 300: World Architecture I/Western Cultures (HU \& H \& G) |
| MKT 394: Special Topics |  |  |


| MKT 395: Essentials of Advertising and Marketing Communication | PUP 190: Sustainable Cities ((HU or SB) \& G) | APH 300: World Architecture I/Western Cultures (HU \& H \& G) |
| :---: | :---: | :---: |
| PHI 360: Business and Professional Ethics $(\mathrm{HU})$ | PUP 200: Cities in Cinema (HU \& H) | APH 305: Contemporary Architecture (HU \& H) |
| SOC 324: Work and the Workplace (SB \& H) | GRA 101: Designing Life | APH 336: 20th-Century Architecture I (HU) |
| TWC 301: General Principles of Multimedia Writing (L) |  | APH 337: 20th-Century Architecture II (HU) |
| TWC 347: Written Communication for Managers (L) |  | LPH 311: Topics in Contemporary Landscape Architecture (HU) |
| HDA 494: Design and the Arts Bus Administration |  |  |
| DSC 494: Practice Management |  |  |
| Junior General Design | Sophomore Communication for Design | Junior Communication for Design |
| IND 344: Human Factors in Design | COM 100: Introduction to Human Communication (SB) | MKT 390: Essentials of Marketing |
| IND 354: Principles of Product Design |  | MKT 391: Essentials of Selling |
| PUP 301: Introduction to Urban Planning (L) |  | MKT 394: Special Topics |
| PUP 420: Theory of Urban Design (HU) |  | MKT 395: Essentials of Advertising and Marketing Communication |
|  | COM 250: Introduction to Organizational Communication (SB) |  |
| Studies | COM 259: Communication in Business and the Professions | TWC 301: General Principles of Multimedia Writing (L) |
| INT 394: Design and Human Behavior |  | TWC 347: Written Communication for Managers (L) |
| INT 394: Introduction to CAD | COM 110: Elements of Interpersonal Communication (SB) |  |
| GRA 401: Creative Environment |  | ENG 301: Writing for the Professions (L) |
| GRA 440: Finding Purpose |  | COM 312: Communication, Conflict, and Negotiation |
| Sophomore Design History | Senior List Lower division |  |
| ALA 100: Introduction to Environmental Design (HU \& H \& G) | COM 100: Introduction to Human Communication (SB) |  |
| DSC 101: Design Awareness (HU \& G) | COM 250: Introduction to Organizational Communication (SB) |  |
| GRA 111: Graphic Design History I (HU) | COM 259: Communication in Business and the Professions |  |
| GRA 112: Graphic Design History II |  |  |
| INT 111: Interior Design Issues and Theories (HU) | COM 263: Elements of Intercultural Communication (SB \& C \& G) |  |
|  | ECN 212: Microeconomic Principles (SB) |  |
|  | PHI 103: Principles of Sound Reasoning (L or $\mathrm{HU})$ |  |
|  | PHI 105: Intro to Ethics (HU) |  |
|  | COM 110: Elements of Interpersonal Communication (SB) |  |

## Notes:

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Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map Film (Film \& Media Production), BA

Herberger Institute for Design and the Arts
Campus:Tempe
FAFLMBA


| Term 2 16-30 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Complete 2 courses: <br> FMS 100: Introduction to Film (HU) OR <br> FMS 200: Film History ((L or HU )\& H) OR <br> FMP 201: Film: The Creative Process I (HU) OR <br> FMP 250: Sex and Violence in Film and TV: Ethics Survey | 6 | C | - THF 160 must be completed by term 2 <br> - THF 126 must be completed by term 2 <br> - Students interested in the Film and Media Production concentration must successfully pass an interview and portfolio review in the semester they are completing the film core. See the Film and Media Production major map. For interview and portfolio review visit http://theatrefilm.asu.edu/admissions/undergrad/applying/ba_film.php <br> - Minimum 3.0 cumulative GPA required in Theatre and Film courses <br> - Minimum 2.5 cumulative ASU GPA |
| THP 261: Introduction to Screenwriting | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Maintain 3.00 GPA in Major Courses. |  |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | $1: \quad 15$ |  |  |
| Term 3-43 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |

FMS 100: Introduction to Film (HU) OR
FMS 200: Film History ( L or HU )\& H) OR 3 C THP 261 must be completed by term 3
FMP 201. Film. The Creative Process I (HU) OR
C
FMP 250: Sex and Violence in Film and TV: Ethics Survey
THF 220: Principles of Dramatic Analysis AND
Literacy and Critical Inquiry (L)
THF 215: Design and Composition for Theatre and Film
3 C

Natural Science - Quantitative (SQ)
4
Maintain 3.00 GPA in Major Courses.
Minimum 2.50 GPA ASU Cumulative.
Milestone: Interview \& Portfolio review required.
Complete First-Year Composition requirement.
Complete Mathematics (MA) requirement.
Term hours subtotal:

- Students interested in the Film and Media Production concentration must successfully pass an interview and portfolio review in the semester they are completing the film core. See the Film and Media Production major map. For interview and portfolio review see http://theatrefilm.asu.edu/admissions/undergrad/applying/ba_film.phF
- Minimum 3.0 cumulative GPA required in Theatre and Film courses
- Minimum 2.5 cumulative ASU GPA

| Term 4 44-60 Credit Hours | Hours | Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 FMP 300: Film Production Part 1, Focus on Film | 3 | C | - Minimum 3.0 cumulative GPA required in Theatre and Film courses <br> - Minimum 2.5 cumulative ASU GPA <br> - Complete THF 220 by the end of term 4 |
| FMP 220: Final Cut for Filmmakers | 1 | C |  |
| Film Elective (choose from film courses with FMP, THE or THP prefix) | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| Elective | 3 |  |  |
| $\begin{aligned} & \text { Natural Science - Quantitative (SQ) OR } \\ & \text { Natural Science - General (SG) } \end{aligned}$ | 4 |  |  |
| Maintain 3.00 GPA in Major Courses. |  |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 5 61-75 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| FMP 320: Film and Media Post-Production | 3 | C | - Minimum 3.0 cumulative GPA required in Theatre and Film courses <br> - Minimum 2.5 cumulative ASU GPA |
| Film Elective (choose from film courses with FMP, THE or THP prefix) | 3 | C |  |
| THP 387: Acting: TV and Film | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Maintain 3.00 GPA in Major Courses. |  |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 76-91 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| FMP 318: Directing for Film | 3 | C | - Complete FMP 318 by the end of term 6. <br> - Minimum 3.0 cumulative GPA required in Theatre and Film courses <br> - Minimum 2.5 cumulative ASU GPA |
| THE 403: Independent Film (HU) | 3 | C |  |
| Upper Division Film Elective (choose from film course with FMP, THE or THP prefix) | 3 | C |  |
| Elective | 4 |  |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Maintain 3.00 GPA in Major Courses. |  |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 7 92-106 Credit Hours Critical course signified by ${ }^{\text {7 }}$ | Hours | Minimum Grade | Notes |
| FMP 480: Film Production Capstone I | 3 | C | - Minimum 3.0 cumulative GPA required in Theatre and Film courses <br> - Minimum 2.5 cumulative ASU GPA |
| Upper Division Film Elective (choose from film course with FMP, THE or THP prefix) | 3 | C |  |
| Elective | 3 |  |  |
| Upper Division Elective | 6 |  |  |
| Maintain 3.00 GPA in Major Courses. |  |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 107-120 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| FMP 481: Film Production Capstone II | 3 | C | - FMP 417 only offered spring semester. <br> - Minimum 3.0 cumulative GPA required in Theatre and Film courses <br> - Minimum 2.5 cumulative ASU GPA <br> - Transfers students who did not take THF 125 in term 1, take an additional hour of elective credit to complete 120 hours. |
| FMP 417: Business Ethics in Entertainment | 3 | C |  |
| Upper Division Film Elective (choose from film course with FMP, THE or THP prefix) | 3 | C |  |
| Elective | 2-3 |  |  |
| Upper Division Elective | 3 |  |  |
| Maintain 3.00 GPA in Major Courses. |  |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14-15 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Film (Filmmaking Practices), BA

Herberger Institute for Design and the Arts
Campus:Tempe
FAFPRBA

| Term 1 0-15 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. THF 125: Orientation to Theatre \& Film | 1 | B- | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. Theatre and Film students complete THF 125 to fulfill this requirement. <br> - Minimum 3.0 cumulative GPA required in Theatre and Film courses <br> - Minimum 2.5 cumulative ASU GPA |
| FMS 100: Introduction to Film (HU) OR <br> FMS 200: Film History ((L or HU )\& H) OR <br> FMP 201: Film: The Creative Process I (HU) OR <br> FMP 250: Sex and Violence in Film and TV: Ethics Survey OR <br> Acting Elective (Choose from THF 101 or THP 194: Understanding Acting) | 3 | C |  |
| THF 126: The First Year Experience | 2 | C |  |
| THF 160: Introduction to Storytelling | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 2 16-30 Credit Hours Critical course signified by | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| FMS 100: Introduction to Film (HU) OR <br> FMS 200: Film History ((L or HU )\& H) OR <br> FMP 201: Film: The Creative Process I (HU) OR <br> FMP 250: Sex and Violence in Film and TV: Ethics Survey OR <br> Acting Elective (Choose from THF 101 or THP 194: Understanding Acting) | 6 | C | - THF 160 must be completed by term 2 <br> - THF 126 must be completed by term 2 <br> - THP 261 must be completed by term 3 <br> - Minimum 3.0 cumulative GPA required in Theatre and Film courses <br> - Minimum 2.5 cumulative ASU GPA |
| THP 261: Introduction to Screenwriting | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |


| Term 3-46 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| FMS 100: Introduction to Film (HU) OR <br> FMS 200: Film History ((L or HU )\& H) OR <br> FMP 201: Film: The Creative Process I (HU) OR <br> FMP 250: Sex and Violence in Film and TV: Ethics Survey OR <br> Acting Elective (Choose from THF 101 or THP 194: Understanding <br> Acting) | 6 | C | - THP 261 must be completed by term 3 <br> - Students interested in the Film and Media Production concentration must successfully pass an interview and portfolio review in the semester they are completing the Film core. See Film and Media Production major map. For information on the interview process, visit: <br> theatrefilm.asu.edu/admissions/undergrad/applying/ba_film.php <br> - Minimum 3.0 cumulative GPA required in Theatre and Film courses <br> - Minimum 2.5 cumulative ASU GPA |
| THF 220: Principles of Dramatic Analysis AND Literacy and Critical Inquiry (L) | 3 | C |  |
| THF 215: Visual Literacy for Stage and Screen | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | : 16 |  |  |
| Term 4 47-62 Credit Hours | Hours | Minimum Grade | Notes |
| FMP 300: Film Production Part 1, Focus on Film | 3 | C | omplete THF 220 by the end of term 4 |


| Film elective (choose from film courses with FMP, THE or THP <br> prefix) | 3 | C |
| :--- | :---: | :---: |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the <br> U.S. (C) | 3 |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |
| Elective |  | 3 |
|  | Term hours subtotal: | 16 |

- Students interested in the Film and Media Production concentration must successfully pass an interview and portfolio review in the semester they are completing the Film core. See Film and Media Production major map. For information on the interview process, visit:
theatrefilm.asu.edu/admissions/undergrad/applying/ba_film.php
- Minimum 3.0 cumulative GPA required in Theatre and Film courses
- Minimum 2.5 cumulative ASU GPA

| Term 5 63-78 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| FMP 494: Film Production Crew OR <br> FMP 484: Internship | 1 | C | - Complete FMP 300 by the end of term 5 . <br> - Students must take three credit hours of either FMP 494 Film Production Crew or FMP 484 Internship to satisfy the requirement. <br> - Minimum 3.0 cumulative GPA required in Theatre and Film courses <br> - Minimum 2.5 cumulative ASU GPA |
| Film elective (choose from film courses with FMP, THE or THP prefix) | 3 | C |  |
| THE 403: Independent Film (HU) | 3 | C |  |
| Upper Division Related Study Elective: Film course outside School of Theatre and Film | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 6 79-94 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| FMP 494: Film Production Crew OR FMP 484: Internship | 1 | C | - Students must take three credit hours of either FMP 494 Film Production Crew or FMP 484 Internship to satisfy the requirement. <br> - Minimum 3.0 cumulative GPA required in Theatre and Film courses <br> - Minimum 2.5 cumulative ASU GPA |
| Upper Division Film Elective (choose from film courses with FMP, THE or THP prefix) | 3 | C |  |
| Upper Division Related Study Elective: Film course outside School of Theatre and Film | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Elective | 6 |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 7 95-107 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| FMP 494: Film Production Crew OR FMP 484: Internship | 1 | C | - Students must take three credit hours of either FMP 494 Film Production Crew or FMP 484 Internship to satisfy the requirement. <br> - Minimum 3.0 cumulative GPA required in Theatre and Film courses <br> - Minimum 2.5 cumulative ASU GPA |
| Upper Division Film Elective (choose from film courses with FMP, THE or THP prefix) | 6 | C |  |
| Upper Division Elective | 6 |  |  |
| Term hours subtotal: | 13 |  |  |


| Term 8 108-120 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Upper Division Film Elective (choose from film courses with FMP, THE or THP prefix) | 3 | C | - Minimum 3.0 cumulative GPA required in Theatre and Film courses <br> - Minimum 2.5 cumulative ASU GPA <br> - Transfer students take two hours of elective credit in term 8 to complete 120 hours because they do not take THF 125 in term 1. |
| Upper Division Related Study Elective: Film course outside School of Theatre and Film | 3 | C |  |
| Upper Division Elective | 6 |  |  |
| Elective | 1-2 |  |  |
| Term hours subtotal: | 13-14 |  |  |

- Students must take three credit hours of either FMP 494 Film Production Crew or FMP 484 Internship to satisfy the requirement.

| Total Hours: 120 | General University Requirements Legend | General Studies Awareness Requirements: |
| :--- | :--- | :--- |
| Upper Division Hours: 45 minimum | General Studies Core Requirements: | - Cultural Diversity in the U.S. (C) |
| Major GPA: 2.00 minimum | - Literacy and Critical Inquiry (L) | • Global Awareness (G) |
| Cumulative GPA: 2.00 minimum | - Mathematical Studies (MA) | • Historical Awareness (H) |
| Total hrs at ASU: 30 minimum | - Computer/Statistics/Quantitative Applications |  |
| Hrs Resident Credit for | (CS) | First-Year Composition |
| Academic Recognition: 56 minimum | - Humanities, Fine Arts and Design (HU) |  |
| Total Community College Hrs: 64 maximum | - Social and Behavioral Sciences (SB) |  |
|  | - Natural Science - Quantitative (SQ) |  |
|  | - Natural Science - General (SG) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4 UNIVERSITY

## 2011-2012 Major Map <br> Graphic Design, BSD

Herberger Institute for Design and the Arts Campus:Tempe
ARGRABSD

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 DSC 194: ASU Design Experience | 1 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. Design majors complete DSC 194 to fulfill this requirement. |
| 4 GRA 101: Designing Life | 3 | C |  |
| 1. GRA 111: Graphic Design History I (HU) | 3 | C |  |
| 4 GRA 121: Principles for Graphic Design I | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| INT 121: Introduction to Computer Modeling for Interior Design (CS) OR Computer/Statistics/Quantitative Applications (CS) | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {2 }}$ - Hours | $\begin{aligned} & \text { mum } \\ & \text { ade } \end{aligned}$ |  | Notes |


| GRA 112: Graphic Design History II | 3 | C |
| :--- | :---: | :---: |
| GRA 122: Principles for Graphic Design II | 3 | C |
| ARS 101: Art from Prehistory Through Middle Ages (HU \& H) | 3 |  |
| ENG 101 or ENG 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107 or ENG 108: English for Foreign Students | 3 | C |
| MAT 142: College Mathematics (MA) | 3 |  |
| Milestone: Evaluation required. |  |  |

- Graphic Design majors must successfully pass a degret milestone at the end of their freshman year to continue in the degree program. Applying to pass the degree milestone requirement is competitive and limited by available resources. Selection is awarded to those applicants demonstrating the highest promise for professional success. Students who do not pass the degree milestone should meet with their academic advisor. For more information on the degree milestone application process, visit

Minimum 2.75 GPA ASU Cumulative.
http://herbergerinstitute.asu.edu/degrees/milestone.php

| Term 3-46 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 GRA 220: Design Drawing I | 3 | C |  |
| 1. GRA 221: Letterform | 3 | C |  |
| 1. GRA 222: Visual Communication I | 3 | C |  |
| 4 GRA 225: Communication/Interaction Design Theory | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 47-62 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 4 GRA 223: Typography | 3 | C |  |
| 4 GRA 224: Visual Communication II | 3 | C |  |
| PGS 101: Introduction to Psychology (SB) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Elective | 3 |  |  |


| Term 5 63-77 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| GRA 321: Technology for Design I |  | 3 | C |  |
| GRA 361: Visual Communication III |  | 5 | C |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) |  | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) |  | 4 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 78-91 Credit Hours |  | Hours | Minimum Grade | Notes |
| GRA 322: Technology for Design II |  | 3 | C | - Summer Internship: students complete the internship in the summer between terms 6 and 7 . |
| GRA 345: Design Rhetoric (L) |  | 3 | C |  |
| GRA 362: Visual Communication IV |  | 5 | C |  |
| ARS 300: Introduction to Art (HU) |  | 3 | C |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 7 92-107 Credit Hours |  | Hours | Minimum Grade | Notes |
| GRA 421: Exhibit Design |  | 3 | C | - Summer Internship: students complete the internship in the summer between terms 6 and 7 . |
| GRA 422: Motion Graphics and Interaction Design |  | 3 | C |  |
| GRA 461: Visual Communication V |  | 5 | C |  |
| GRA 484: Internship |  | 2 | Y |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |  |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 8 108-120 Credit Hours |  | Hours | Minimum <br> Grade | Notes |
| GRA 423: Advanced Interaction Design |  | 3 | C |  |
| GRA 424: Advanced Media |  | 3 | C |  |
| GRA 462: Visual Communication VI |  | 5 | C |  |
| Elective |  | 2 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 13 |  |  |

[^9]Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year

## 2011-2012 Major Map Industrial Design, BSD <br> Herberger Institute for Design and the Arts Campus:Tempe <br> ARINDBSD

| Term $10-16$ Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 DSC 194: ASU Design Experience | 1 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. Design majors take DSC 194 to fulfill this requirement. |
| 4 DSC 101: Design Awareness (HU \& G) | 3 | C |  |
| 4 IND 120: Drawing for Industrial Design | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 170: Precalculus (MA) | 3 |  |  |
| PGS 101: Introduction to Psychology (SB) | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |



| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| :---: | :---: | :---: | :---: |
| Elective | 3 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 64-77 Credit Hours | Hours | Minimum Grade | Notes |
| IND 327: Presentation Graphics | 3 | C |  |
| IND 316: 20th-Century Design I (HU \& H) | 3 | C |  |
| IND 344: Human Factors in Design | 3 | C |  |
| IND 360: Industrial Design III | 5 | C |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 6 78-91 Credit Hours | Hours | Minimum Grade | Notes |
| IND 317: 20th-Century Design II (HU \& H) | 3 | C |  |
| IND 328: Graphics for Industrial Design | 3 | C | complete an internship between |
| IND 354: Principles of Product Design | 3 | C | terms 6 and 7. |
| IND 361: Industrial Design IV | 5 | C |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 7 92-107 Credit Hours | Hours | Minimum Grade | Notes |
| IND 460: Design Project I | 5 | C |  |
| IND 470: Professional Practice for Industrial Design (L) | 3 | C | complete the internship between |
| IND 484: Internship | 2 | Y | terms 6 and 7. |
| Cultural Diversity in the U.S. (C) | 3 |  | be approved by industrial design |
| MKT 395: Essentials of Advertising and Marketing Communication OR Upper Division Approved Marketing Course | 3 |  | before enrolling for the course. Please see advisor. |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 8 108-120 Credit Hours | Hours | Minimum Grade | Notes |
| IND 461: Design Project II | 5 | C |  |
| ENG 301: Writing for the Professions (L) | 3 |  |  |
| Elective | 5 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13 |  |  |

## Notes:

- Milestone: Industrial Design Â during semester 2, students will apply to pass a degree milestone requirement. This is an evaluation of general academic and specific performance. Students with the best scores as competitively ranked will continue to take courses leading to the Bachelor of Science in Design degree (BSD). Students that do not pass the degree milestone should see an academic advisor if they need assistance.
- Submit samples of studio work for evaluation to the Herberger Institute Office of Student Success, Design South (CDS), room 101.
- Most studio and some lecture courses are sequential, must be taken in, and may be offered only during the semester noted.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Interior Design, BSD

Herberger Institute for Design and the Arts Campus:Tempe
ARINTBSD

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 DSC 194: ASU Design Experience | 1 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. Design majors take DSC 194 to fulfill this requirement. |
| 4 INT 111: Interior Design Issues and Theories (HU) | 3 | C |  |
| 4. INT 120: Design Drawing and Media | 3 | C |  |
| 4 INT 121: Introduction to Computer Modeling for Interior Design (CS) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 170: Precalculus (MA) | 3 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 INT 123: Introduction to Computer-Aided Design of Built Environments | 3 | C | - Interior Design majors must successfully pass a degree milestone at the end of their freshman year to continue in the degree program. Applying to pass the degree |
| 4 INT 131: Design and Human Behavior (SB) | 3 | C |  |
| 4 INT 221: Principles of Design | 3 | C | milestone requirement is competitive and limited by available resources. Selection is awarded to those |
| 4 INT 222: Principles of Design Lecture | 1 | C | applicants demonstrating the highest promise for <br> professional success. Students who do not pass the |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | degree milestone should meet with their academic advisor. For more information on the degree milestone application process, visit |
| Elective | 2 |  |  |


| Term hours subtotal: 15 |  |  |  |
| :---: | :---: | :---: | :---: |
| Term 3 32-44 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 1. INT 223: Drafting for Interior Design | 3 | C |  |
| 9 INT 261: Interior Design Studio I: Residential | 3 | C |  |
| PHY 101: Introduction to Physics (SQ) | 4 | C |  |
| Literacy and Critical Inquiry (L) | 3 | C |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| 1. Complete Mathematics (MA) requirement. |  |  |  |
| 1 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 4 45-58 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 1 INT 253: Interior Materials, Finishes, and Specifications | 3 | C |  |
| 1 INT 262: Interior Design Studio II: Hospitality | 3 | C |  |
| 1 INT 341: Interior Codes: Public Welfare and Safety | 2 | C |  |
| ARS 102: Art from Renaissance to Present (HU \& H) | 3 | C |  |


| Term 5 59-73 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| INT 310: History of Interior Design I (HU \& H) |  | 3 | C |  |
| INT 351: Ambient Environment |  | 3 | C |  |
| INT 352: Construction Methods in Interior Design |  | 3 | C |  |
| INT 362: Interior Design Studio II: Hospitality and Retail |  | 5 | C |  |
| INT 381: Preinternship Seminar |  | 1 | Y |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 74-87 Credit Hours |  | Hours | Minimum Grade | Notes |
| INT 311: History of Interior Design II (HU \& H) |  | 3 | C | - Summer Internship: students complete an internship between terms 6 and 7. |
| INT 354: Construction Documents |  | 3 | C |  |
| INT 363: Interior Design Studio III |  | 5 | C |  |
| Global Awareness (G) |  | 3 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 7 88-104 Credit Hours |  | Hours | Minimum Grade | Notes |
| INT 415: Latin American Design |  | 3 | C | - Summer Internship: students complete an internship between terms 6 and 7. |
| INT 464: Interior Design Studio IV: Work Environments |  | 5 | C |  |
| INT 471: Facilities Management |  | 3 | C |  |
| INT 484: Internship |  | 2 | Y |  |
| $\begin{aligned} & \text { Natural Science - General (SG) OR } \\ & \text { Natural Science - Quantitative (SQ) } \end{aligned}$ |  | 4 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 17 |  |  |
| Term 8 105-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| INT 465: Interior Design Studio V: Institutional Design |  | 5 | C |  |
| INT 472: Professional Practice for Interior Design |  | 2 | C |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Elective |  | 6 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |

[^10]Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## 2011-2012 Major Map Landscape Architecture, BSLA

Herberger Institute for Design and the Arts
Campus:Tempe
ARPLABSLA


APH 337: 20th-Century Architecture II (HU)
APH 493: Honors Thesis (L)
APH 494: Special Topics
APH 499: Individualized Instruction
DSC 394: Design and Context
IND 316: 20th-Century Design I (HU \& H)
IND 317: 20th-Century Design II (HU \& H)
INT 310: History of Interior Design I (HU \&
H)
INT 311: History of Interior Design II (HU \&
H)
INT 412: History of Decorative Arts in
Interiors (HU)
INT 413: History of Textiles in Interior
Design
LPH 394: Special Topics
LPH 494: Special Topics
Upper Division LAP (excluding LAP 484)

## Notes:

- Most studio and some lecture courses are sequential, must be taken in, and may be offered only during the semester noted.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4 UNIVERSITY

## 2011-2012 Major Map <br> Music, BA

Herberger Institute for Design and the Arts
Campus:Tempe
FAMUSBA

| Term 1 0-17 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade |
| :---: | :---: | :---: |
| Milestone: School of Music students must successfully complete an entrance audition into the major before enrolling at ASU. |  |  |
| 1. MUP 194: ASU School of Music Experience | 1 | C |
| $\dagger^{1}$ MUP 111: Studio Instruction | 2 | C |
| 1. $4^{* *}$ Music Ensemble | 1 | C |
| 4 MTC 125: Basic Music Theory | 3 | C |
| MUP 131: Class Piano | 1 | C |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |
| MAT 142: College Mathematics (MA) | 3 |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |
| Term hours subtotal: | 17 |  |

- See below for entrance Milestone, required for completion prior to Term 1
- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics course
- MUP 194 ASU School of Music Experience - First Year Seminar required of all freshman music majors. Transfer students must substitute an additional semester of MUP 100 for a total six semesters of MUP 100.
- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts.
- MUP 4xx Elective must be an upper division ensemble.
- Courses offered in fall semester only: MTC 125, MUP 131, MUP 194

| Term 2 18-33 Credit Hours Critical course signified by 4 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MHL 140: Music as Culture (HU \& G) | 3 | C | - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in spring semester only: MTC 221, MUP 132 <br> Notes <br> - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in Term 1. |
| 4 MTC 221: Music Theory: 18th Century | 3 | C |  |
| 4 MUP 111: Studio Instruction | 2 | C |  |
| $4.4 * *$ Music Ensemble | 1 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |
| MUP 132: Class Piano | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 34-48 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ |  |
| 4 MUP 111: Studio Instruction | 2 | C |  |
| $44^{* *}$ Music Ensemble | 1 | C |  |
| 1. MTC 222: Music Theory: 19th Century | 3 | C |  |
| 4 MUP 100: Concert Attendance | 0 |  |  |


| MUP 231: Class Piano | 1 |
| :--- | :---: |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including <br> American Sign Language IV. | 4 |
| Natural Science - Quantitative (SQ) | 4 |
| Complete First-Year Composition requirement. |  |
| Complete Mathematics (MA) requirement. | Term hours subtotal: |

- Complete MUP 131 by end of term 3
- Second Language: Consult with advisor for approved list; It is recommended for Second Language 101 and 102 to be completed by the end of term 4
- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in fall semester only: MTC 222, MUP 231

| Term 4 49-63 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MTC 223: Music Theory: 20th Century | 3 | C | - It is recommended for Second Language 101 and 102 to be completed by the end of term 4 <br> - Complete MUP 132 by end of term 4 <br> - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in spring semester only: MTC 223, MUP 232 |
| 4 MUP 100: Concert Attendance | 0 |  |  |
| 4. MUP 111: Studio Instruction | 2 | C |  |
| ! $4^{* *}$ Music Ensemble | 1 | C |  |
| MUP 232: Class Piano | 1 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 |  |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Term hours subtotal: | 15 |  |  |


| Term 5 64-78 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MHL 341: Music History (HU) | 3 | C | - Complete Second Language 201 and 202 by the end of term 6 <br> - Complete MUP 231 by end of term 5 <br> - 1 semester of Counterpoint is required. Choose from MTC 320 or MTC 321. Complete by the end of term 6 <br> - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Courses offered in fall semester only: MHL 341, MTC 320 (odd numbered fall semesters only) |
| MTC 320: Modal Counterpoint OR MTC 321: Tonal Counterpoint | 2 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |
| Computer/Statistics/Quantitative Applications (CS) OR MHL 201: Mac Literacy for Musicians (CS) | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 |  |  |
| Term hours subtotal: | 15 |  |  |


| Term 6 79-91 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MHL 342: Music History (HU) | 3 | C | - Complete Second Language 201 and 202 by the end of term 6 <br> - Complete MUP 232 by end of term 6 <br> - 1 semester of Counterpoint is required. Choose from MTC 320 or MTC 321 . Complete by the end of term 6 |
| MTC 320: Modal Counterpoint OR MTC 321: Tonal Counterpoint | 0 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |
| MHL OR MTC OR MUP OR MUE Upper Division Elective | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 |  |  |

- Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Courses offered in spring semester only: MHL 342, MTC 321 (odd numbered spring semesters only)

| Term 7 92-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| MTC 422: Musical Acoustics |  | 3 | C | - Complete one semester of concert attendance with a grade of "pass" if not yet completed freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Courses offered in fall semester only: MTC 422 |
| Complete 2 courses: <br> MHL OR MTC Upper Division Elective |  | 6 | C |  |
| MHL OR MTC OR MUP OR MUE Upper Division Elective |  | 3 | C |  |
| Upper Division Elective |  | 2 |  |  |
|  | Term hours subtotal: | 14 |  |  |


| Term 8 |  |  | Hours |
| :--- | :--- | :--- | :--- |
| MHL Upper Division Elective |  | Minimum <br> Grade | Notes |

MUP Ensembles
MUP 494: Choral Ensembles
MUP 494: Instrumental Ensembles
MUP 386: Concert Jazz Band, Jazz Repertory
Band, Latin Jazz Ensemble
MUP 379: Jazz Combo
MUP 379: Guitar Ensemble
MUP 379: Piano Ensemble

## Notes:

- Prior to term 1:Â
- Milestone 1: All students who wish to enroll in an undergraduate music degree program are required to pass an entrance audition in their primary performing medium (instrument or voice) before pursuing a major in the School of Music.
- Milestone 2: All music majors must take the music theory diagnostic exam before registering for classes. Contact the School of Music Undergraduate Office (480.965.5069) for testing information.
- Milestone 3: All music majors (with the exception of those auditioning on keyboard instruments) must take the piano diagnostic exam prior to registering for class piano. Students who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts.
- MUP 194 is for ASU freshman students only. Transfer students must substitute an additional semester of MUP 100 for a total six semesters of MUP 100 .
- 

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Music Education (Choral-General), BMUS

Herberger Institute for Design and the Arts
Campus:Tempe
FAMUSCBMUS

| Term 1 0-17 Credit Hours Critical course signified by 9 | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| :---: | :---: | :---: | :---: |
| Milestone: School of Music students must successfully complete an entrance audition into the major before enrolling at ASU. |  |  | - See below for entrance Milestone, required for completion prior to Term 1 <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - MUP 194 ASU School of Music Experience - First Year Seminar required of all freshman students. Transfer students must substitute an additional semester of MUP 100 for a total of six semesters. <br> - Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered fall semester only: MUP 194, MTC 125, MUP 131, MUP 133 |
| 4 MUP 194: ASU School of Music Experience | 1 |  |  |
| 4 MHL 140: Music as Culture (HU \& G) | 3 | C |  |
| 1 MUP 111: Studio Instruction | 2 | C |  |
| 4 MTC 125: Basic Music Theory | 3 | C |  |
| MUP 131: Class Piano OR MUP 133: Class Voice | 1 | C |  |
| 4 MUP 494: Choral Ensembles | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Term hours subtotal: | 17 |  |  |



| Term 3 33-47 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. MHL 341: Music History (HU) | 3 | C | - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for ensemble requirements and |
| 4 MTC 222: Music Theory: 19th Century | 3 | C |  |
| 4 MUE 161: Introduction to Music Therapy | 2 | C |  |
| 1 MUP 100: Concert Attendance | 0 |  |  |
| MUP 231: Class Piano OR MUP 233: Class Voice | 1 | C |  |


| 1. MUP 494: Choral Ensembles | 1 | C |
| :---: | :---: | :---: |
| 4 MUP 111: Studio Instruction | 2 | C |
| Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |
| Milestone: All Music Education students must audition with Music Education Faculty during this term. |  |  |
| Complete First-Year Composition requirement. |  |  |
| Complete Mathematics (MA) requirement. |  |  |
| Term hours subtotal: | 15 |  |
| Term 4 48-65 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade |
| 1 MHL 342: Music History (HU) | 3 | C |
| 4 MTC 223: Music Theory: 20th Century | 3 | C |
| 4 MUP 111: Studio Instruction | 2 | C |
| 4. MUP 209: Beginning Choral Conducting | 1 | C |
| MUP 232: Class Piano OR MUP 234: Class Voice | 1 | C |
| 1. MUP 494: Choral Ensembles | 1 | C |
| MUP 100: Concert Attendance | 0 |  |
| MHL 201: Mac Literacy for Musicians (CS) | 3 | C |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 | C |
| Milestone: All Music Education students must successfully complete the milestone for |  |  |

studio instruction is determined based on successful completion of audition and review of transcripts.

- For iTeachAZ, completion of th Intent to Progress Form (meet with Teachers College advisor to complete)
- For iTeachAZ, apply for DPS fingerprint clearance card
- Courses offered in fall semester only: MHL 341, MTC 222, MUP 231, MUP 233


## Notes

- Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts.
- For iTeachAZ, attend Teachers College Enrollment Workshop.
- For iTeachAZ, submit copy of DPS fingerprint clearance card to Teachers College (Farmer Bld room 120)
- Courses offered in spring semester only: MHL 342, MTC 223, MUP 232, MUP 234

| Term 5 66-80 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MUE 315: General Music in Secondary Schools | 2 | B | - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 |
| MUP 301: Advanced Class Piano OR MUP 321: Studio Instruction | 1 | C |  |
| MUP 311: Studio Instruction | 2 | C |  |
| MUP 339: Choral Conducting | 2 | C |  |
| MUP 494: Choral Ensembles | 1 | C |  |
| SED 396: Field Experience I | 1 | C | - Applicability of transfer credit for ensemble requirements and studio instruction is determined |
| MUP 100: Concert Attendance | 0 |  |  |
| BLE 220: Foundations of Structured English Immersion | 3 | C | based on successful completion |
| TEL 315: Child and Adolescent Development (L or SB) | 3 | C | of audition and review of transcripts |
| Term hours subtotal: | 15 |  | - Courses offered in fall semester only: MUP 301, MUP 339 |


| Term 6 81-95 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MUE 480: Choral Methods | 4 | B | - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP |
| MUP 100: Concert Attendance | 0 |  |  |
| MUP 311: Studio Instruction | 2 | C |  |
| MUP 302: Advanced Class Piano OR MUP 321: Studio Instruction | 1 | C |  |
| MUP 494: Choral Ensembles | 1 | C |  |
| SED 397: Field Experience II | 1 |  | - Applicability of transfer credit |
| Literacy and Critical Inquiry (L) | 3 |  | for ensemble requirements and studio instruction is determined |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR GCU 194: U.S. and Arizona for Aspiring Elementary Educators | 3 |  | based on successful completion of audition and review of |
| Term hours subtotal: | 15 |  |  |

- Courses offered in spring semester only: MUE 480, MUP 302

| Term 7-110 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| BLE 407: SEI for Secondary Students |  | 3 | C | - Complete one semester of concert attendance with a grade of "pass" if not completed freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts <br> - Course offered in fall semester only: MUE 313 |
| MUE 313: Elementary Music Methods |  | 4 | B |  |
| MUP 311: Studio Instruction |  | 2 | C |  |
| MUP 494: Choral Ensembles |  | 2 | C |  |
| MUP 495: Performance |  | 0 |  |  |
| MUP OR MHL OR MTC OR MUE Elective |  | 3 | C |  |
| SED 496: Field Experience III |  | 1 |  |  |
|  | Term hours subtotal: | 15 |  |  |


| Term 8 111-120 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MUP 311: Studio Instruction | 2 | C | - Take the AEPA Test in Semesteı 8 (necessary for teacher certification). |
| SED 478: Student Teaching in the Secondary School | 8 |  |  |
|  | 10 |  |  |

- Students needing full-time registration may register for 12 hours of student teaching.
- Complete one semester of concert attendance with a grade of "pass" if not completed freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts.


## Notes:

[^11]Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Music Education (Instrumental), BMUS

Herberger Institute for Design and the Arts
Campus:Tempe
FAMUSIIBM

| Term 1 0-17 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade |
| :---: | :---: | :---: |
| Milestone: School of Music students must successfully complete an entrance audition into the major before enrolling at ASU. |  |  |
| 1 MUP 194: ASU School of Music Experience | 1 |  |
| 4 MTC 125: Basic Music Theory | 3 | C |
| 4 MUP 111: Studio Instruction | 2 | C |
| 4 MUP 361: Marching and Concert Bands | 1 | C |
| 1 MUP 494: Instrumental Ensembles | 1 | C |
| 4. Upper Division MUE Methods Course | 1 | C |
| Upper Division MUE Methods Course | 1 | C |
| MUP 131: Class Piano | 1 | C |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |
| MAT 142: College Mathematics (MA) | 3 | C |
| Term hours subtotal: | 17 |  |

- See below for entrance Milestone, required for completion prior to Term 1
- Instrumental music education majors must take MUP 361 Marching Band in terms 1 and 3.
- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics course
- MUP 194: ASU School of Music Experience - First Year Seminar required of all freshman music majors. Transfer students must substitute an additional semester of MUP 100 for a total of 6 semesters.
- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered fall semester only: MUP 194, MTC 125, MUP 361, MUP 131

| Term 2 18-33 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. MHL 140: Music as Culture (HU \& G) | 3 | C | - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts <br> - Courses offered in spring semester only: MUE 110, MTC 221, MUP 132 <br> Notes <br> - Instrumental music education majors must take MUP 361 Marching Band in terms 1 and 3. - MUP 131 by end of term 3 |
| 4 MTC 221: Music Theory: 18th Century | 3 | C |  |
| 4 MUE 110: Introduction to Music Education | 1 | C |  |
| 4 MUP 111: Studio Instruction | 2 | C |  |
| 1 MUP 494: Instrumental Ensembles | 1 | C |  |
| 4. Upper Division MUE Methods Course | 1 | C |  |
| Upper Division MUE Methods Course | 1 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |
| MUP 132: Class Piano | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 34-50 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade |  |
| 4 MHL 341: Music History (HU) | 3 | C |  |
| 4 MTC 222: Music Theory: 19th Century | 3 | C |  |
| 4 MUP 111: Studio Instruction | 2 | C |  |


| Upper Division MUE Methods Course | 1 | C |
| :--- | :---: | :---: |
| MUP 361: Marching and Concert Bands | 1 | 0 |
| MUP 100: Concert Attendance | 3 | C |
| MHL 201: Mac Literacy for Musicians (CS) | 4 |  |
| Natural Science - Quantitative (SQ) |  | C |
| Milestone: All Music Education students must audition with Music Education Faculty <br> during this term. |  |  |
| Complete First-Year Composition requirement. |  |  |
| Complete Mathematics (MA) requirement. | Term hours subtotal: | 17 |

- Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts.
- For iTeachAZ, completion of the Intent to Progress form (meet with Teachers College advisor to complete)
- For iTeachAZ, apply for DPS fingerprint clearance card
- Courses offered in fall semester only: MHL 341, MTC 222, MUP 361

| Term 4 51-66 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MHL 342: Music History (HU) | 3 | C | - Complete one semester of concert attendance with a grade of "pass" - students must complete 5 semesters <br> - MUP 132 must be completed by end of term 4 |
| \% MTC 223: Music Theory: 20th Century | 3 | C |  |
| 4 MUP 111: Studio Instruction | 2 | C |  |
| 1 MUP 379: Chamber Music Ensembles | 1 | C |  |
| 4 MUP 494: Instrumental Ensembles | 1 | C |  |
| 4 Upper Division MUE Methods Course | 1 | C | and a string methods course; See |
| Upper Division MUE Methods Course | 1 | C | additional notes below. <br> - For iTeachAZ, attend Teachers |
| 1 MUP 100: Concert Attendance | 0 |  | College Enrollment Workshop. |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 | C | DPS fingerprint clearance card to Teachers College (Farmer Bld |
| Milestone: All Music Education students must successfully complete the milestone for iTeachAZ Professional Program this semester. |  |  | room 120) <br> - Courses offered in spring |
| Term hours subtotal: | 16 |  | semester only: MHL 342, MTC 223 |


| Term 5 67-81 Credit Hours Critical course signified by | Hours | Minimum Grade |
| :---: | :---: | :---: |
| MUE 161: Introduction to Music Therapy | 2 | C |
| MUE 481: Instrumental Practicum/Methods | 4 | B |
| MUP 210: Beginning Instrumental Conducting | 1 | C |
| MUP 311: Studio Instruction | 2 | C |
| MUP 494: Instrumental Ensembles | 1 | C |
| MUP 133: Class Voice | 1 | C |
| MUP 100: Concert Attendance | 0 |  |
| SED 396: Field Experience I | 1 | C |
| TEL 315: Child and Adolescent Development (L or SB) | 3 | C |
|  | 15 |  |

- Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts.
- Complete 12 hours of upper division coursework by end of term 5
- Prior to taking MUE 481, students must have taken one brass, woodwind, percussion, and a string methods course; See additional notes below.
- Courses offered in fall semester only: MUE 481, MUP 210, MUP 133

| Term 6 82-97 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| BLE 220: Foundations of Structured English Immersion | 3 | C | - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in spring semester only: MUE 482, MUP 340 |
| MUE 482: Instrumental Practicum/Methods | 4 | B |  |
| MUP 100: Concert Attendance | 0 |  |  |
| MUP 311: Studio Instruction | 2 | C |  |
| MUP 340: Instrumental Conducting | 2 | C |  |
| MUP 494: Instrumental Ensembles | 1 | C |  |
| SED 397: Field Experience II | 1 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR GCU 194: U.S. and Arizona for Aspiring Elementary Educators | 3 |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 7 98-112 Credit Hours Critical course signified by | Hours | Minimum <br> Grade |
| :--- | :--- | :---: |
| BLE 407: SEI for Secondary Students | 3 | C |
| Literacy and Critical Inquiry (L) | 3 |  |
| MUP 311: Studio Instruction | 2 | C |
| MUE 315: General Music in Secondary Schools | 2 | B |
| MUP 495: Performance | 0 |  |
| MUP 494: Instrumental Ensembles | 1 | C |
| SED 496: Field Experience III | 1 |  |
| Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |
|  | Term hours subtotal: | 15 |

- Complete one semester of concert attendance with a grade of "pass" if not completed freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts.



## MUE Methods Course

MUE 317: Educational Methods for Violin and Viola

MUE 318: Educational Methods for Cello and String Bass

MUE 327: Educational Methods for Trumpet and Horn

MUE 335: Educational Methods for Guitar
MUE 336: Educational Methods for
Percussion
MUE 337: Educational Methods for Flute,
Clarinet, and Saxophone
MUE 338: Educational Methods for Double Reed Instruments

## Notes:

- Prior to term 1:
- Milestone 1: All students who wish to enroll in an undergraduate music degree program are required to pass an entrance audition in their primary performing medium (instrument or voice) before pursuing a major in the School of Music.
- Milestone 2: All music majors must take the music theory diagnostic exam before registering for classes. Contact the School of Music Undergraduate Office (480.965.5069) for testing information.
- Milestone 3: All music majors (with the exception of those auditioning on keyboard instruments) must take the piano diagnostic exam prior to registering for class piano. Students who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts.
- MUP 194 is for ASU freshman students only. Transfer students must substitute an additional semester of MUP 100 for a total six semesters of MUP 100 .

Total Hours: 122
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Music Education (String), BMUS

Herberger Institute for Design and the Arts
Campus:Tempe
FAMUSISBM

| Term 1 0-15 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Milestone: School of Music students must successfully complete an entrance audition into the major before enrolling at ASU. |  |  | - See below for entrance Milestone, required for completion prior to Term 1 <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - MUP 194: ASU School of Music experience required of all freshman music majors. Transfer students must substitute an additional semester of MUP 100 for a total of 6 semesters. <br> - Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered fall semester only: MUP 194, MTC 125, MUP 131 |
| 4 MUP 194: ASU School of Music Experience | 1 |  |  |
| 4 MTC 125: Basic Music Theory | 3 | C |  |
| 4 MUP 111: Studio Instruction | 2 | C |  |
| 1 MUP 494: Instrumental Ensembles | 1 | C |  |
| 4 Upper Division MUE Methods Course | 1 | C |  |
| MUP 131: Class Piano | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Term hours subtotal: | 15 |  |  |


| Term 2 16-31 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MTC 221: Music Theory: 18th Century | 3 | C | - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in spring semester only: MUE 110, MTC 221, MUP 132 <br> Notes <br> - MUP 131 by end of term 3 <br> - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 |
| 4 MUE 110: Introduction to Music Education | 1 | C |  |
| 1 MUP 111: Studio Instruction | 2 | C |  |
| 1 MUP 494: Instrumental Ensembles | 1 | C |  |
| 1. MHL 140: Music as Culture (HU \& G) | 3 | C |  |
| 4 Upper Division MUE Methods Course | 1 | C |  |
| Upper Division MUE Methods Course | 1 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |
| MUP 132: Class Piano | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 32-48 Credit Hours Critical course signified by ${ }^{\text {\% }}$ | Hours | Minimum Grade |  |
| 1. MHL 341: Music History (HU) | 3 | C |  |
| 4 MTC 222: Music Theory: 19th Century | 3 | C |  |
| 1 MUP 111: Studio Instruction | 2 | C |  |
| 1. MUP 121: Studio Instruction | 1 | C |  |
| 1. MUP 133: Class Voice | 1 | C |  |


| 4. MUP 494: Instrumental Ensembles | 1 | C |
| :--- | :--- | :--- |
| (1) Upper Division MUE Methods Course | 1 | C |
| (-) MUP 379: Chamber Music Ensembles | 1 | C |
| (1) MUP 100: Concert Attendance | 0 |  |
| Natural Science - Quantitative (SQ) | 4 | C |

Milestone: All Music Education students must audition with Music Education Faculty during this term.
Complete First-Year Composition requirement.
9 Complete Mathematics (MA) requirement.

| Term 4 49-66 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade |
| :---: | :---: | :---: |
| 1 MHL 342: Music History (HU) | 3 | C |
| 1 MTC 223: Music Theory: 20th Century | 3 | C |
| 1 MUP 111: Studio Instruction | 2 | C |
| 1 MUP 121: Studio Instruction | 1 | C |
| 1. MUP 494: Instrumental Ensembles | 1 | C |
| 4 Upper Division MUE Methods Course | 1 | C |
| 1 . MUP 100: Concert Attendance | 0 |  |
| MUP 100: Concert Attendance | 0 |  |
| MHL 201: Mac Literacy for Musicians (CS) | 3 | C |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 | C |

Milestone: All Music Education students must successfully complete the milestone for
iTeachAZ Professional Program this semester

|  | Term hours subtotal: | 18 |  |
| :---: | :---: | :---: | :---: |
| Term 5 67-81 Credit Hours Critical course signified by |  | Hours | Minimum Grade |
| MUE 161: Introduction to Music Therapy |  | 2 | C |
| MUE 485: String Practicum/Methods |  | 4 | B |
| MUP 121: Studio Instruction |  | 1 | C |
| MUP 210: Beginning Instrumental Conducting |  | 1 | C |
| MUP 311: Studio Instruction |  | 2 | C |
| MUP 494: Instrumental Ensembles |  | 1 | C |
| MUP 100: Concert Attendance |  | 0 |  |
| SED 396: Field Experience I |  | 1 | C |
| TEL 315: Child and Adolescent Development (L or SB) |  | 3 |  |
|  | Term hours subtotal: | 15 |  |

- MUP 132 must be completed by end of term 4
- Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in spring semester only: MHL 342, MTC 223, MUP 232
- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in fall semester only: MHL 341, MTC 222, MUP 133
- Courses offered in spring semester only: MUE 482, MUP 340

| Term 7-113 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| BLE 407: SEI for Secondary Students | 3 | C | - Complete one semester of concert attendance with a grade of "pass" if not completed freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts. |
| MUE 315: General Music in Secondary Schools | 2 | B |  |
| MUP 311: Studio Instruction | 2 | C |  |
| MUP 494: Instrumental Ensembles | 1 | C |  |
| MUP 495: Performance | 0 |  |  |
| SED 496: Field Experience III | 1 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |



## MUE Methods Course

MUE 317: Educational Methods for Violin and Viola

MUE 318: Educational Methods for Cello and String Bass

MUE 327: Educational Methods for Trumpet and Horn

MUE 328: Educational Methods for
Trombone, Euphonium, and Tuba
MUE 335: Educational Methods for Guitar
MUE 336: Educational Methods for
Percussion
MUE 337: Educational Methods for Flute, Clarinet, and Saxophone

MUE 338: Educational Methods for Double Reed Instruments

## Notes:

- Prior to term 1:
- Milestone 1: All students who wish to enroll in an undergraduate music degree program are required to pass an entrance audition in their primary performing medium (instrument or voice) before pursuing a major in the School of Music.
- Milestone 2: All music majors must take the music theory diagnostic exam before registering for classes. Contact the School of Music Undergraduate Office (480.965.5069) for testing information.
- Milestone 3: All music majors (with the exception of those auditioning on keyboard instruments) must take the piano diagnostic exam prior to registering for class piano. Students who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts.
- MUP 194 is for ASU freshman students only. Transfer students must substitute an additional semester of MUP 100 for a total six semesters of MUP 100 .

Total Hours: 123
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year

## 2011-2012 Major Map Music Therapy, BMUS

Herberger Institute for Design and the Arts
Campus:Tempe
FAMUSTHBM

| Term 1-16 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Milestone: School of Music students must successfully complete an entrance audition into the major before enrolling at ASU. |  |  | - See below for entrance Milestone, required for completion prior to Term 1 <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - MUP 194: ASU School of Music Experience - First Year Seminar required of all freshman music majors. Transfer students must substitute an additional semester of MUP 100 for a total of six semesters. <br> - Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered fall semester only: MUP 194, MTC 125, MUP 131 |
| 1. MUP 194: ASU School of Music Experience | 1 |  |  |
| 4 MUE 161: Introduction to Music Therapy | 2 | C |  |
| 1 MUP 111: Studio Instruction | 2 | C |  |
| MUP 494: Choral Ensembles, Instrumental Ensembles OR Upper Division MUP Ensemble | 1 | C |  |
| MTC 125: Basic Music Theory | 3 | C |  |
| MUP 131: Class Piano | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) OR MAT 119: Finite Mathematics (MA) | 3 | C |  |
| Term hours subtotal: | 16 |  |  |


| Term 2 17-32 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MHL 140: Music as Culture (HU \& G) | 3 | C | - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 |
| 4. MUP 111: Studio Instruction | 2 | C |  |
| MUP 494: Choral Ensembles, Instrumental Ensembles OR Upper Division MUP Ensemble | 1 | C |  |
| 1. PGS 101: Introduction to Psychology (SB) | 3 | C |  |
| MTC 221: Music Theory: 18th Century | 3 | C | - Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Complete PGS 101 in term 2 required for music therapy certification <br> - Courses offered in spring semester only: MTC 221, MUP 132 |
| MUP 132: Class Piano | 1 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Term hours subtotal: | 16 |  |  |


| Term 3 33-50 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 MHL 341: Music History (HU) | 3 | C | - Complete SOC 101 in term 3 required for music therapy certification <br> - Complete MTC 125 by end of term 3 |
| 4 MUE 211: Music in Recreation | 2 | C |  |
| 4 MUE 261: Music Therapy as a Behavioral Science | 2 | C |  |


| MUP 209: Beginning Choral Conducting OR <br> MUP 210: Beginning Instrumental Conducting | 1 | C |  |
| :--- | :---: | :---: | :---: |
| MUP 494: Choral Ensembles, Instrumental Ensembles OR Upper Division MUP <br> Ensemble | 1 |  |  |
| MUP 100: Concert Attendance | C |  |  |
| SOC 101: Introductory Sociology (SB) | 3 |  |  |
| MTC 222: Music Theory: 19th Century | 3 | 1 | C |
| MUP 231: Class Piano |  |  | C |
| Complete First-Year Composition requirement. | Term hours subtotal: | 18 |  |
| Complete Mathematics (MA) requirement. |  |  |  |

- Complete MUP 131 by end of term 3
- Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in fall semester only: MHL 341, MUE 211, MUE 261, MTC 222, MUP 231, MUP 210

| Term 4 51-63 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade |
| :---: | :---: | :---: |
| 1 MHL 342: Music History (HU) | 3 | C |
| 1 MUP 111: Studio Instruction | 2 | C |
| MUP 494: Choral Ensembles, Instrumental Ensembles OR Upper Division MUP <br> Ensemble | 1 | C |
| 1 MUP 100: Concert Attendance | 0 |  |
| PSY 230: Introduction to Statistics (CS) OR STP 226: Elements of Statistics (CS) | 3 | C |
| MTC 223: Music Theory: 20th Century | 3 | C |
| MUP 232: Class Piano | 1 | C |
| Complete MUP 209, MUP 210 course(s). |  |  |
| Complete MTC 221, MUP 132 course(s). ${ }^{\text {a }}$ Term hours |  |  |
|  | 13 |  |

- Students must pass a jury in tern 4 to reach MUP 311
- Complete 1 semester of conducting by end of term 4 . Choose from MUP 209 or 210. MUP 209 is offered in the fall and spring. MUP 210 is only offered during the fall.
- Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts
- Courses offered in spring semester only: MHL 342, MTC 223, MUP 232

| Term 5 64-79 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MUE 313: Elementary Music Methods | 4 | C | - Complete MTC 222 by end of term 5 <br> - Complete MUP 231 by end of term 5 <br> - 4 hours of MUP 311 are required. Students may substitute performance classes toward this requirement: MUP 301, 302, 317, 387, 417, 440, 4XX Large Ensemble (must be upper division). <br> - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts. |
| MUE 467: Music Therapy Theory and Practice in Psychopathology | 3 | C |  |
| MUE 384: Therapy Preclinical I | 1 | C |  |
| Upper Division Mup 311 or Advanced Performance | 2 | C |  |
| MUP 494: Choral Ensembles, Instrumental Ensembles OR Upper Division MUP Ensemble | 1 | C |  |
| MUP 133: Class Voice | 1 | C |  |
| MUE 335: Educational Methods for Guitar | 1 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |
| CDE 232: Human Development (SB) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |

- Courses offered in fall semester only: MUE 313, MUE 467, MUE 133

| Term 6 80-96 Credit Hours Critical course signified by | Hours | Minimum Grade |
| :---: | :---: | :---: |
| MUE 463: Music Therapy Techniques | 3 | C |
| MUE 381: Music Therapy Research (L) | 3 | C |
| MUE 385: Therapy Preclinical II | 1 | C |
| MUE 489: Repertoire for Music Therapy | 3 | C |
| MUP 100: Concert Attendance | 0 |  |
| MUP 134: Class Voice | 1 | C |
| Upper Division Mup 311 or Advanced Performance | 2 | C |
| MUP 494: Choral Ensembles, Instrumental Ensembles OR Upper Division MUP Ensemble | 1 | C |
| SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 |  |
| Term hours subtotal: | 17 |  |

- Complete MTC 223 by end of term 6
- Complete MUP 232 by end of term 6
- 4 hours of MUP 311 are required. Students may substitute performance classes toward this requirement: MUP 301, 302, 317, 387, 417, 440, 4XX Large Ensemble (must be upper division)
- Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in spring semester only: MUE 463, MUE 381, MUE 489, MUP 134

Term $797-108$ Credit Hours $\quad$ Hours | Minimum |
| :---: |
| Grade |

| BIO 201: Human Anatomy and Physiology I (SG) | 4 |  |
| :--- | :---: | :---: |
| MUE 386: Therapy Preclinical III |  | 1 |
| MUE 475: Group Process and Music Therapy | 1 | C |
| Upper Division Mup 311 or Advanced Performance | 0 | C |
| PGS 466: Abnormal Psychology (SB) |  | C |
| Literacy and Critical Inquiry (L) AND Historical Awareness (H) |  | 3 |
|  | Term hours subtotal: | 12 |

- 4 hours of MUP 311 are required. Complete remaining requirements if not completed already. Students may substitute performance classes toward this requirement: MUP 301, 302, 317, 387, 417, 440, 4XX Large Ensemble (must be upper division).
- Complete one semester of concert attendance with a grade of "pass" if not already completed - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts.
- Course offered in fall semester only: MUE 475

| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| DCE Elective | 2 |  | - 4 hours of MUP 311 are required. Complete remaining requirements if not completed already. Students may substitute performance classes toward this requirement: MUP 301, 302, |
| MUE 387: Therapy Preclinical IV | 1 | C |  |
| MUE 476: Internship in Music Therapy | 1 | C |  |
| MUE 441: Psychology of Music | 3 | C |  |
| Upper Division Mup 311 or Advanced Performance | 0 | C |  |

317, 387, 417, 440, 4XX Large
Ensemble (must be upper division).

- Complete one semester of concert attendance with a grade of "pass" if not already completed - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts.
- Students register for MUE 476 (6-month internship) in last semester and complete it after finishing all coursework for the degree. Degree is posted after completion of all requirements and the internship.
- Courses offered in spring semester only: MUE 441, MUE 436
MUP Ensembles
MUP 494: Choral Ensembles
MUP 494: Instrumental Ensembles
MUP 386: Concert Jazz Band, Jazz Repertory
Band, Latin Jazz Ensemble
MUP 379: Jazz Combo
MUP 379: Guitar Ensemble
MUP 379: Piano Ensemble


## Notes:

## - Prior to term 1:Â

- Milestone 1: All students who wish to enroll in an undergraduate music degree program are required to pass an entrance audition in their primary performing medium (instrument or voice) before pursuing a major in the School of Music.
- Milestone 2: All music majors must take the music theory diagnostic exam before registering for classes. Contact the School of Music Undergraduate Office (480.965.5069) for testing information.
- Milestone 3: All music majors (with the exception of those auditioning on keyboard instruments) must take the piano diagnostic exam prior to registering for class piano. Students who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts.
- MUP 194 is for ASU freshman students only. Transfer students must substitute an additional semester of MUP 100 for a total six semesters of MUP 100 .
- Four semesters of ensembles must be large ensembles
- MUP 133 and MUP 134 (Class Voice) may be waived if major instrument is voice. Students must substitute music elective credit.
- 

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Performance (Collaborative Piano), BMUS

Herberger Institute for Design and the Arts
Campus:Tempe
FAMUSPPBM

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Milestone: School of Music students must successfully complete an entrance audition into the major before enrolling at ASU. |  |  | - See below for entrance Milestone, required for completion prior to Term 1 <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses |
| 1. MUP 194: ASU School of Music Experience | 1 |  |  |
| 4 MUP 127: Studio Instruction | 4 | C |  |
| 1 MUP 379: Chamber Music Ensembles | 1 | C |  |
| 4. $4^{* *}$ MUP Music Ensemble | 1 | C | - ASU Math Placement Exam score determines placement in |
| MTC 125: Basic Music Theory | 3 | C | Mathematics course |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - MUP 194: ASU School of Music Experience - First Year Seminar required of all freshman |
| MAT 142: College Mathematics (MA) | 3 |  | music majors. Transfer students |
| Term hours subtotal: | 16 |  | semester of MUP 100 for a total of 6 semesters. <br> - Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered fall semester only: MTC 125, MUP 194 |


| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| - MHL 140: Music as Culture (HU \& G) | 3 | C | - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 |
| 4 MUP 127: Studio Instruction | 4 | C |  |
| 1. MUP 379: Chamber Music Ensembles | 1 | C |  |
| ! $4^{* *}$ MUP Music Ensemble | 1 | C |  |
| MUP 100: Concert Attendance | 0 |  | - Applicability of transfer credit for ensemble requirements and |
| MTC 221: Music Theory: 18th Century | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | based on successful completion of audition and review of |
| Term hours subtotal: | 15 |  | transcripts. <br> - Course offered in spring semester only: MTC 221 |


| Term 3 32-47 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. MUP 127: Studio Instruction | 4 | C | - Complete MTC 125 by end of term 3 |
| 4 MUP 250: Diction for Singers | 1 | C |  |
| 1 MUP 379: Piano Ensemble | 1 | C | concert attendance with a grade of "pass" - freshman must |
| 4 MUP 100: Concert Attendance | 0 |  | complete 5 semesters; transfer |
| Computer/Statistics/Quantitative Applications (CS) OR MHL 201: Mac Literacy for Musicians (CS) | 3 | C | because they do not take MUP 194 in term 1 |
| MTC 222: Music Theory: 19th Century | 3 | C | - Applicability of transfer credit for studio instruction is |
| Natural Science - Quantitative (SQ) | 4 |  |  |

Complete First-Year Composition requirement.
Complete Mathematics (MA) requirement.
Term hours subtotal:
16
determined based on successful completion of audition and review of transcripts.

- Course offered in fall semester only: MTC 222

| Term 4 48-61 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4. MUP 127: Studio Instruction | 4 | C | - Complete MTC 221 by end of term 4 <br> - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Course offered in spring semester only: MTC 223 |
| 4 MUP 100: Concert Attendance | 0 |  |  |
| MTC 223: Music Theory: 20th Century | 3 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 14 |  |  |


| Term 5 62-74 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MHL 341: Music History (HU) | 3 | C | - Complete MTC 222 by end of term 5 <br> - MUP 209 or MUP 210 may be taken to complete 1 semester conducting requirement; Complete by end of term 6 <br> - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in fall semester only: MHL 341, MUP 210 |
| MUP 311: Studio Instruction | 2 | C |  |
| MUP 337: Studio Instruction: Collaborative Piano | 2 | C |  |
| MUP 388: Collaborative Piano | 1 | C |  |
| MUP 209: Beginning Choral Conducting OR MUP 210: Beginning Instrumental Conducting | 1 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |
| MUP 495: Performance | 0 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| MHL OR MTC OR MUP OR MUE Upper Division Elective | 1 |  |  |
| Term hours subtotal: | 13 |  |  |


| Term 6 75-90 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| MHL 342: Music History (HU) |  | 3 | C | - Complete MTC 223 by end of term 6 <br> - MUP 209 or MUP 210 may be taken to complete 1 semester conducting requirement; Complete by end of term 6 <br> - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in spring semester only: MHL 342, MTC 428 (odd numbered spring semesters only) |
| MUP 100: Concert Attendance |  | 0 |  |  |
| MUP 311: Studio Instruction |  | 2 | C |  |
| MUP 337: Studio Instruction: Collaborative Piano |  | 2 | C |  |
| MUP 388: Collaborative Piano |  | 1 | C |  |
| MUP 451: Piano Chamber Music |  | 2 | C |  |
| MUP 495: Performance |  | 0 |  |  |
| MTC 428: Advanced form and Analysis |  | 3 | C |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
|  | Term hours subtotal: | 16 |  |  |


| Term 7 91-106 Credit Hours | Hours | Minimum <br> Grade |
| :--- | :--- | :---: |
| MUP 311: Studio Instruction | 2 | C |
| MUP 337: Studio Instruction: Collaborative Piano | 2 | C |
| MUP 388: Collaborative Piano | 1 | C |
| MUP 453: Song Literature | 2 | C |
| MUP 496: Performance | 0 |  |
| MHL OR MTC OR MUP Elective | 3 |  |
| MHL OR MTC OR MUP OR MUE Upper Division Elective | 3 |  |
| MHL 440: Music Since 1900 (L or HU) OR Upper Division MHL course (L) | 3 | C |

- MHL 440 recommended to complete the upper division music history elective and upper division literacy and critical inquiry general studies requirement. Otherwise, students must take an upper division MHL elective in term 7 and an upper division literacy and critical inquiry course in term 8 in place of the elective.
- Complete one semester of concert attendance with a grade of "pass" if not yet completed freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Applicability of transfer credit for studio instruction is determined based on successful completion of audition and review of transcripts.

| Term 8 107-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| MUP 311: Studio Instruction |  | 2 | C | - MHL 440 recommended to complete the upper division music history elective and upper division literacy and critical inquiry general studies requirement. Otherwise, students must take an upper division MHL elective in term 7 and an upper division literacy and critical inquiry course in term 8 in place of the elective. <br> - Complete one semester of concert attendance with a grade of "pass" if not yet completed freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for studio instruction is determined based on successful completion of audition and review of transcripts. |
| MUP 337: Studio Instruction: Collaborative Piano |  | 2 | C |  |
| MUP 388: Collaborative Piano |  | 1 | C |  |
| MUP 487: Collaborative Piano |  | 1 | C |  |
| MUP 454: Song Literature |  | 2 | C |  |
| MUP 496: Performance |  | 0 |  |  |
| MHL OR MTC OR MUP OR MUE Upper Division Elective |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 14 |  |  |



## Notes:

- Prior to term 1:
- Milestone 1: All students who wish to enroll in an undergraduate music degree program are required to pass an entrance audition in their primary performing medium (instrument or voice) before pursuing a major in the School of Music
- Milestone 2: All music majors must take the music theory diagnostic exam before registering for classes. Contact the School of Music Undergraduate Office (480.965.5069) for testing information.
- MUP 194 is for ASU freshman students only. Transfer students must substitute an additional semester of MUP 100 for a total six semesters of MUP 100 .
- MHL 440 and MUP 481 recommended electives

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Performance (Guitar), BMUS

Herberger Institute for Design and the Arts
Campus:Tempe
FAMUSPGBM

| Term 1-16 Credit Hours Critical course signified by | Hours | Minimum Grade |
| :---: | :---: | :---: |
| Milestone: School of Music students must successfully complete an entrance audition into the major before enrolling at ASU. |  |  |
| 1. MUP 194: ASU School of Music Experience | 1 |  |
| 4. MUP 127: Studio Instruction | 4 | C |
| 4 MUP 379: Guitar Ensemble | 1 | C |
| MTC 125: Basic Music Theory | 3 | C |
| MUP 131: Class Piano | 1 | C |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |
| MAT 142: College Mathematics (MA) | 3 |  |
| Term hours subtotal: | 16 |  |

- See below for entrance Milestone, required for completion prior to Term 1
- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics course
- MUP 194: ASU School of Music Experience - First Year Seminar required of all freshman music majors. Transfer students must substitute an additional semester of MUP 100 for a total of six semesters.
- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered fall semester only: MTC 125, MUP 194, MUP 131

| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MHL 140: Music as Culture (HU \& G) | 3 | C | - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in spring semester only: MTC 221, MUP 132 |
| 1 MUP 127: Studio Instruction | 4 | C |  |
| 4 MUP 379: Guitar Ensemble | 1 | C |  |
| MTC 221: Music Theory: 18th Century | 3 | C |  |
| MUP 132: Class Piano | 1 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Term hours subtotal: | 15 |  |  |


| Term 3 32-46 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. MUP 127: Studio Instruction | 4 | C | - Complete MTC 125 by end of term 3 <br> - Complete MUP 131 by end of term 3 |
| 1 MUP 379: Guitar Ensemble | 1 | C |  |
| 4 MUP 100: Concert Attendance | 0 |  |  |
| MHL 201: Mac Literacy for Musicians (CS) OR Computer/Statistics/Quantitative Applications (CS) | 3 | C | concert attendance with a grade of "pass" - freshman must |
| MTC 222: Music Theory: 19th Century | 3 | C | complete 5 semesters; transfer |
| MUP 231: Class Piano | 1 | C | students complete 6 semesters |

194 in term 1

- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in fall semester only: MTC 222, MUP 231

| Term 4 47-61 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MUP 127: Studio Instruction | 4 | C | - Complete 12 hours of upper division coursework by end of term 5 <br> - Complete MTC 221 by end of term 4 <br> - Complete MUP 132 by end of term 4 <br> - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in spring semester only: MTC 223, MUP 232 |
| 4 MUP 379: Guitar Ensemble | 1 | C |  |
| 4 MUP 100: Concert Attendance | 0 |  |  |
| MTC 223: Music Theory: 20th Century | 3 | C |  |
| MUP 232: Class Piano | 1 | C |  |
| MHL OR MTC OR MUP Elective | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |


| Term 5 62-76 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| MHL 341: Music History (HU) |  | 3 | C | - Complete MTC 222 by end of term 5 <br> - Complete MUP 232 by end of term 5 <br> - One semester of counterpoint is required. Choose from MTC 320 (modal - fall) or 321 (tonal spring). Complete by end of term 6. <br> - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in fall semester only: MHL 341, MUP 210, MUP 320 (odd numbered fall semesters only) |
| MUP 210: Beginning Instrumental Conducting |  | 1 | C |  |
| MUP 327: Studio Instruction |  | 4 | C |  |
| MUP 379: Guitar Ensemble |  | 1 | C |  |
| MTC 320: Modal Counterpoint OR MTC 321: Tonal Counterpoint |  | 2 | C |  |
| MUP 100: Concert Attendance |  | 0 |  |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) |  | 4 |  |  |
|  | Term hours subtotal: | 15 |  |  |


| Term 6 77-91 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MHL 342: Music History (HU) | 3 | C | - Complete MTC 223 by end of term 6 <br> - Complete MUP 232 by end of term 6 |
| MTC 320: Modal Counterpoint OR MTC 321: Tonal Counterpoint | 0 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |


| MUP 327: Studio Instruction | 4 | C |
| :--- | :---: | :---: |
| MUP 379: Guitar Ensemble | 1 | C |
| MUP 495: Performance |  | 0 |
| Literacy and Critical Inquiry (L) | 3 |  |
| Natural Science - Quantitative (SQ) OR | 4 |  |
| Natural Science - General (SG) | Term hours subtotal: | 15 |

- One semester of counterpoint is required. Choose from MTC 320 (modal - fall) or 321 (tonal spring). Complete by end of term 6.
- Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in spring semester only: MTC 321 (odd numbered spring semesters only), MHL 342

| Term 7 92-107 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MUP 327: Studio Instruction | 4 | C | - MHL 439 or 440 recommended to complete the upper division music history elective and upper division literacy general studies requirement. Otherwise, students must take an upper division MHL elective in term 7 and an upper division Literacy course in term 8 in place of the upper division elective. <br> - Complete one semester of concert attendance with a grade of "pass" if not yet completed freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for ensemble requirements and studio instruction is determined based on successful completion of audition and review of transcripts. |
| MUP 379: Guitar Ensemble | 1 | C |  |
| MUP 451: Repertoire | 2 | C |  |
| Complete 2 courses: <br> MHL OR MTC OR MUP OR MUE Upper Division Elective | 6 | C |  |
| MHL 439: Topics in 19th-Century Music (L \& H) OR MHL 440: Music Since 1900 (L or HU) OR Upper Division MHL course (L) | 3 | C |  |
| Term hours subtotal: | 16 |  |  |


Recommended Music Electives
MHL 440: Music Since 1900 (L or HU)
MHL 201: Mac Literacy for Musicians (CS)
MUP 340: Instrumental Conducting
MUP 451: Repertoire

Notes:

## - Prior to semester 1:

- Milestone 1: All students who wish to enroll in an undergraduate music degree program are required to pass an entrance audition in their primary performing medium (instrument or voice) before pursuing a major in the School of Music.
- Milestone 2: All music majors must take the music theory diagnostic exam before registering for classes. Contact the School of Music Undergraduate Office (480.965.5069) for testing information.
- Milestone 3: All music majors (with the exception of those auditioning on keyboard instruments) must take the piano diagnostic exam prior to registering for class piano. Students who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts.
- MUP 194 is for ASU freshman students only. Transfer students must substitute an additional semester of MUP 100 for a total six semesters of MUP 100 .
- Four semesters of MUP 379: CME: Guitar Ensemble required

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## Hrs Resident Credit for

Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Performance (Jazz), BMUS

Herberger Institute for Design and the Arts
Campus:Tempe
FAMUSPJBM

| Term 1 $0-16$ Credit Hours Critical course signified by | Hours | Minimum <br> Grade |  |
| :--- | :---: | :---: | :---: |
| Milestone: School of Music students must successfully complete an entrance audition into <br> the major before enrolling at ASU. |  |  |  |
| MUP 194: ASU School of Music Experience | 1 |  |  |
| MUP 111: Studio Instruction | 2 |  |  |
| MUP 117: Applied Jazz Improvisation | 1 | C |  |
| MUP 379: Jazz Studio Classes | 1 | C |  |
| MUP 379: Jazz Combo | 1 | C |  |
| MTC 125: Basic Music Theory | 3 | C |  |
| MUP 131: Class Piano | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR | 3 | C |  |
| ENG 105: Advanced First-Year Composition OR |  |  |  |
| ENG 107 or ENG 108: English for Foreign Students | Term hours subtotal: | 16 | C |
| MAT 142: College Mathematics (MA) | 3 |  |  |
|  |  | 16 |  |

- See below for entrance Milestone, required for completion prior to Term 1
- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics course
- MUP 194: ASU School of Music Experience - First Year Seminar required of all freshman music majors. MUP 194 is for ASU freshman students only. Transfer students must substitute an additional semester of MUP 100 for a total of six semesters.
- Applicability of transfer credit for ensembles and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered fall semester only: MTC 125, MUP 131, MUP 194

| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. MHL 140: Music as Culture (HU \& G) | 3 | C | - Complete one semester of concert attendance with a grade of ""pass"" - freshman students must complete 5 semesters; transfers must complete 6 semesters because they do not take MUP 194 in term 1. <br> - Applicability of transfer credit for ensembles and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in spring semester only: MTC 221, MUP 132 |
| 4 MUP 111: Studio Instruction | 2 | C |  |
| 4 MUP 117: Applied Jazz Improvisation | 1 | C |  |
| 4 MUP 379: Jazz Studio Classes | 1 | C |  |
| 1 MUP 379: Jazz Combo | 1 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MTC 221: Music Theory: 18th Century | 3 | C |  |
| MUP 132: Class Piano | 1 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 32-48 Credit Hours Critical course signified by | Hours | Minimum Grade |  |
| 4 MUP 111: Studio Instruction | 2 | C | - Complete one semester of concert attendance with a grade of ""pass"" freshman students must complete 5 semesters; transfers must complete 6 semesters because they do not take MUP 194 in term 1. |
| 4 MUP 217: Applied Jazz Improvisation | 2 | C |  |
| 4 MUP 379: Jazz Studio Classes | 1 | C |  |
| 1. MUP 379: Jazz Combo | 1 | C |  |


| MUP 235: Jazz Piano | 1 | C |
| :--- | :--- | :--- |
| MTC 222: Music Theory: 19th Century | 3 | C |
| Natural Science - Quantitative (SQ) | 4 |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) |  |  |
| Complete First-Year Composition requirement. |  |  |
| Complete Mathematics (MA) requirement. |  |  |

Term hours subtotal: 17 term 3

- Complete MUP 131 by end of term 3
- Applicability of transfer credit for ensembles and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in fall semester only: MTC 222, MUP 235

| Term 4 49-65 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 MUP 111: Studio Instruction | 2 | C | - Complete one semester of concert attendance with a grade of ""pass"" freshman students must complete 5 semesters; transfers must complete 6 semesters because they do not take MUP 194 in term 1. <br> - Complete 12 hours of upper division coursework by end of term 5 <br> - Complete MTC 221 by end of term 4 <br> - Complete MUP 132 by end of term 4 <br> - Applicability of transfer credit for ensembles and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in spring semester only: MTC 223, MUP 236 |
| 4 MUP 217: Applied Jazz Improvisation | 2 | C |  |
| 4 MUP 379: Jazz Studio Classes | 1 | C |  |
| 1 MUP 379: Jazz Combo | 1 | C |  |
| 4 MUP 100: Concert Attendance | 0 |  |  |
| MTC 223: Music Theory: 20th Century | 3 | C |  |
| MUP 236: Jazz Piano | 1 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |



| Term 6 80-94 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MHL 342: Music History (HU) | 3 | C | - Complete one semester of concert attendance with a grade of ""pass"" freshman students must complete 5 semesters; |
| MTC 316: Modern Arranging | 2 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |
| MUP 311: Studio Instruction | 2 | C |  |


| MTC 440: Jazz Theory and Ear Training | 2 | C |  |
| :--- | :--- | :---: | :---: |
| MUP 319: Recording Studio Techniques | 2 | C |  |
| MUP 495: Performance |  | 0 |  |
| Literacy and Critical Inquiry (L) | Term hours subtotal: | 15 |  |
|  |  |  |  |

transfers must complete 6 semesters because they do not take MUP 194 in term 1.

- Complete MTC 223 by end of term 5
- Complete MTC 236 by end of term 5
- Applicability of transfer credit for ensembles and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in spring semester only: MHL 342, MTC 316, MUP 319

Term 7 95-108 Credit Hours $\quad$ Hours | Minimum |
| :---: |
| Grade |

| MUP 311: Studio Instruction | 2 | C |
| :--- | :---: | :---: |
| MUP 317: Applied Jazz Improvisation | 2 | C |
| MUP 386: Jazz Band | 1 | C |
| MHL 439: Topics in 19th-Century Music (L \& H) OR MHL 440: Music Since 1900 (L or <br> HU) OR Upper Division MHL course (L) | 3 | C |
| MHL OR MTC OR MUP Elective | 3 | C |
| Elective | Term hours subtotal: | 14 |

- MHL 439 or 440 recommended to complete the upper division music history elective and upper division literacy general studies requirement. Otherwise, student must take an upper division MHL elective in term 7 and an upper division Literacy course in term 8 in place of the elective.
- Complete one semester of concert attendance with a grade of "pass" if not yet completed freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Applicability of transfer credit for ensembles and studio instruction is determined based on successful completion of audition and review of transcripts.

Term 8 109-120 Credit Hours $\quad$ Hours | Minimum |
| :---: |
| Grade | Notes

| MTC 441: Jazz Composition | 2 | C |
| :--- | :--- | :---: |
| MUP 311: Studio Instruction | 2 | C |
| MUP 317: Applied Jazz Improvisation | 2 | C |
| MUP 386: Jazz Band |  | 1 |
| MUP 495: Performance |  | C |
| MHL OR MTC OR MUP OR MUE Upper Division Elective |  | 2 |
| Elective | Term hours subtotal: | 12 |

- MHL 439 or 440 recommended to complete the upper division music history elective and upper division literacy and critical inquiry general studies requirement. Otherwise, students must take an upper division MHL elective in term 7 and an upper division literacy and critical inquiry course in term 8 in place of the elective.
- Applicability of transfer credit for ensembles and studio instruction is determined based on successful completion of audition and review of transcripts.
- Complete one semester of concert attendance with a grade of "pass" if not yet completed freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Course offered in spring semester only: MTC 441


## Notes:

- Prior to term 1:
- Milestone 1: All students who wish to enroll in an undergraduate music degree program are required to pass an entrance audition in their primary performing medium (instrument or voice) before pursuing a major in the School of Music.
- Milestone 2: All music majors must take the music theory diagnostic exam before registering for classes. Contact the School of Music Undergraduate Office (480.965.5069) for testing information.
- Milestone 3: All music majors (with the exception of those auditioning on keyboard instruments) must take the piano diagnostic exam prior to registering for class piano. Students who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts.
- MUP 194 is for ASU freshman students only. Transfer students must substitute an additional semester of MUP 100 for a total six semesters of MUP 100 .

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Performance (Keyboard), BMUS

Herberger Institute for Design and the Arts
Campus:Tempe
FAMUSPKBM

| Term 1 $0-15$ Credit Hours Critical course signified by | Hours | Minimum <br> Grade |  |
| :--- | :---: | :---: | :---: |
| Milestone: School of Music students must successfully complete an entrance audition into <br> the major before enrolling at ASU. |  |  |  |
| MUP 194: ASU School of Music Experience | 1 |  |  |
| MUP 127: Studio Instruction | 4 | 1 | C |
| 4** MUP Ensemble | 3 | C |  |
| MTC 125: Basic Music Theory | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR |  | C |  |
| ENG 105: Advanced First-Year Composition OR |  |  |  |
| ENG 107 or ENG 108: English for Foreign Students |  | 3 |  |
| MAT 142: College Mathematics (MA) | Term hours subtotal: | 15 |  |

- See below for entrance Milestone, required for completion prior to Term 1
- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics course
- MUP 194 ASU School of Music Experience - First Year Seminar required of all freshman students. Transfer students must substitute an additional semester of MUP 100 for a total of six semesters.
- Keyboard performance majors typically take choir or chamber music ensembles to complete the MUP 4** requirement.
- Applicability of transfer credit for ensembles and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered fall semester only: MUP 194, MTC 125

| Term 2 16-32 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MHL 140: Music as Culture (HU \& G) | 3 | C | - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1. <br> - Applicability of transfer credit for ensembles and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Course offered in spring semester only: MTC 221 |
| 1 MUP 127: Studio Instruction | 4 | C |  |
| (1) $4 * *$ MUP Ensemble | 1 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MTC 221: Music Theory: 18th Century | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |


| Term 3 33-47 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MUP 127: Studio Instruction | 4 | C | - Complete one semester of concert attendance with a grade of "pass" freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1. |
| (1) $4^{* *}$ MUP Ensemble | 1 | C |  |
| 4 MUP 100: Concert Attendance | 0 |  |  |
| MHL 201: Mac Literacy for Musicians (CS) | 3 |  |  |
| MTC 222: Music Theory: 19th Century | 3 | C |  |


| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |
| :--- | :--- | :---: |
| Complete First-Year Composition requirement. |  |  |
| Complete Mathematics (MA) requirement. | Term hours subtotal: | 15 |

- Complete MTC 125 by end of term 3
- Applicability of transfer credit for ensembles and studio instruction is determined based on successful completion of audition and review of transcripts.
- Course offered in fall semester only: MTC 222

| Term 4 | 48 - 62 Credit Hours Critical course signified by | Hours | Minimum <br> Grade |
| :--- | :---: | :---: | :---: |
| MUP 127: Studio Instruction | 4 | C |  |
| $4 * *$ MUP Ensemble | 1 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |
| MTC 223: Music Theory: 20th Century | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Natural Science - Quantitative (SQ) | Term hours subtotal: | 15 |  |
|  |  |  |  |

- Complete one semester of concert attendance with a grade of "pass" freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1.
- Complete MTC 221 by end of term 4
- Applicability of transfer credit for ensembles and studio instruction is determined based on successful completion of audition and review of transcripts.
- Course offered in spring semester only: MTC 223


instruction is determined based on successful completion of audition and review of transcripts.
- Course offered in spring semester only: MHL 342, MUP 440 (even numbered spring semesters only)

| Term 7 94-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| MHL 440: Music Since 1900 (L or HU) AND Upper Division Literacy and Critical Inquiry (L) |  | 3 | C | - Complete one semester of concert attendance with a grade of "pass" if not completed already freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1. <br> - Applicability of transfer credit for studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in fall semester only: MHL 440, MTC 425 |
| MUP 327: Studio Instruction |  | 4 | C |  |
| MUP 451: Repertoire |  | 2 | C |  |
| MUP 487: Collaborative Piano |  | 1 | C |  |
| MUP 496: Performance |  | 0 |  |  |
| MTC 425: Studies in 20th-Century Theory |  | 3 | C |  |
| Elective |  | 2 |  |  |
|  | Term hours subtotal: | 15 |  |  |


| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| MUP 327: Studio Instruction |  | 4 | C | - Complete one semester of concert attendance with a grade of "pass" if not already completed freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1. <br> - MUP 451 recommended for upper division music elective. <br> - Applicability of transfer credit for studio instruction is determined based on successful completion of audition and review of transcripts. |
| MUP 481: Performance Pedagogy and Materials OR MUP 482: Piano Pedagogy |  | 2 | C |  |
| MUP 487: Collaborative Piano |  | 1 | C |  |
| MUP 496: Performance |  | 0 |  |  |
| MHL Upper Division Elective |  | 3 | C |  |
| MHL OR MTC OR MUP OR MUE Elective |  | 2 | C |  |
|  | Term hours subtotal: | 12 |  |  |



## Notes:

## - Prior to semester 1:

- Milestone 1: All students who wish to enroll in an undergraduate music degree program are required to pass an entrance audition in their primary performing medium (instrument or voice) before pursuing a major in the School of Music.
- Milestone 2: All music majors must take the music theory diagnostic exam before registering for classes. Contact the School of Music Undergraduate Office (480.965.5069) for testing information.
- MUP 194 is for ASU freshman students only. Transfer students must substitute an additional semester of MUP 100 for a total six semesters of MUP 100 .

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## Hrs Resident Credit for

Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Performance (Music Theatre), BMUS

Herberger Institute for Design and the Arts
Campus:Tempe
FAMUSPMBM

| Term 1 0-17 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade |
| :---: | :---: | :---: |
| Milestone: School of Music students must successfully complete an entrance audition into the major before enrolling at ASU. |  |  |
| 4 MUP 194: ASU School of Music Experience | 1 |  |
| (1) MUP 111: Studio Instruction | 2 | C |
| 4 MUP 371: Broadway I | 1 | C |
| 4 MUP 370: Movement | 1 | C |
| 1 MUP 370: Expression | 1 | C |
| MUP 373: Music Theatre: Performance | 1 | C |
| MUP 131: Class Piano | 1 | C |
| MTC 125: Basic Music Theory | 3 | C |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |
| MAT 142: College Mathematics (MA) | 3 |  |
| Term hours subtotal: | 17 |  |

- See below for entrance Milestone, required for completion prior to Term 1
- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics course
- MUP 194 ASU School of Music Experience - First Year Seminar required of all freshman music majors. Transfer students must substitute an additional semester of MUP 100 for a total of six semesters.
- Applicability of transfer credit for studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in fall semester only: MTC 125, MUP 131, MUP 371 Broadway I, MUP 37C Movement, MUP 370
Expression

| Term 2 18-35 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MHL 140: Music as Culture (HU \& G) | 3 | C | - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1. <br> - Applicability of transfer credit for studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in spring semester only: MTC 221, MUP 132, MUP 371 Broadway Scenes, MUP 370 Interpretation <br> Notes <br> - DCE elective must be a movement class <br> - Complete one semester of concert attendance with a grade of "pass" freshman must complete 5 semesters; transfer students complete 6 semesters |
| 4 MUP 111: Studio Instruction | 2 | C |  |
| 4 MUP 370: Interpretation | 1 | C |  |
| 4 MUP 371: Broadway Scene | 1 | C |  |
| MTC 221: Music Theory: 18th Century | 3 | C |  |
| MUP 132: Class Piano | 1 | C |  |
| MUP 373: Music Theatre: Performance | 1 | C |  |
| THP 101: Acting Introduction | 3 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Term hours subtotal: | 18 |  |  |
| Term 3 36-50 Credit Hours Critical course signified by ${ }^{\text {! }}$ | Hours | Minimum Grade |  |
| 1 DCE Elective | 2 | C |  |
| 1 MUP 111: Studio Instruction | 2 | C |  |
| 4 MUP 370: Advanced Expression | 1 | C |  |
| 4 MUP 373: Music Theatre: Performance | 1 | C |  |


| MUP 371: Broadway II | 1 | C |
| :--- | :---: | :---: |
| MUP 374: Technical Music Theatre | 1 | C |
| MUP 100: Concert Attendance | 0 |  |
| MUP 231: Class Piano | 1 | 3 |
| MTC 222: Music Theory: 19th Century | 3 | C |
| Literacy and Critical Inquiry (L) |  | C |
| Complete First-Year Composition requirement. |  |  |
| Complete Mathematics (MA) requirement. | Term hours subtotal: | 15 |

because they do not take MUP 194 in term

- Complete MTC 125 by end of term 3
- Complete MUP 131 by end of term 3
- Applicability of transfer credit for studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in fall semester only: MTC 222, MUP 231, MUP 371 Broadway II, MUP 370 Advanced Expression

| Term 4 51-65 Credit Hours Critical course signified by | Hours | Minimum <br> Grade |
| :--- | :--- | :---: |
| DCE Elective | 2 | C |
| MUP 111: Studio Instruction | 2 | C |
| MUP 371: Audition Track | 1 | C |
| MUP 370: Advanced Interpretation | 1 | C |
| MUP 373: Music Theatre: Performance | 1 | C |
| MUP 374: Problems in Production | 1 | C |
| MUP 100: Concert Attendance | 0 |  |
| MTC 223: Music Theory: 20th Century | Term hours subtotal: | 15 |
| Natural Science - Quantitative (SQ) | 4 | C |

- DCE elective must be a movement class
- Complete one semester of concert attendance with a grade of "pass" freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Complete MTC 221 by end of term 4
- Complete MUP 132 by end of term 4
- Applicability of transfer credit for studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in spring semester only: MTC 223, MUP
371 Audition Training, MUP 370 Advanced Interpretation

| Term 5 66-81 Credit Hours Critical course signified by ${ }^{\text {\% }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| DCE Elective | 2 | C | - DCE elective must be a movement class <br> - Complete one semester of concert attendance with a grade of "pass" freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1. <br> - Complete MTC 222 by end of term 5 <br> - Complete MUP 232 by end of term 5 <br> - 1 semester of MUP 209 required. Complete by term 6 <br> - Applicability of transfer credit for studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Course offered in fall semester only: MHL 341 |
| MHL 341: Music History (HU) | 3 | C |  |
| MUP 209: Beginning Choral Conducting | 1 | C |  |
| MUP 311: Studio Instruction | 2 | C |  |
| MUP 373: Music Theatre: Performance | 1 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| MHL 201: Mac Literacy for Musicians (CS) OR Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 6 82-94 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MUP 209: Beginning Choral Conducting | 0 | C | - DCE elective must be a movement class <br> - Complete one semester of concert attendance with a grade |
| MUP 451: Broadway | 2 | C |  |
| MHL 342: Music History (HU) | 3 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |


| MUP 311: Studio Instruction | 2 | C |
| :--- | :--- | :---: |
| MUP 373: Music Theatre: Performance | 1 | C |
| MUP 494: Acting for Singers |  | 3 |
| DCE Elective | Term hours subtotal: | 13 |

of "pass" freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1

- Complete MTC 223 by end of term 6
- 1 semester of MUP 209 required. Complete by term 6
- Applicability of transfer credit for studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in spring semester only: MHL 342, MUP 451 Broadway

| Term 7 95-108 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MUP 494: Musical Theatre Dance | 3 | C | - May repeat any MUP 371 or Aria Prep <br> - Complete one semester of concert attendance with a grade of "pass" if not already completed freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1. <br> - Applicability of transfer credit for studio instruction is determined based on successful completion of audition and review of transcripts. |
| MUP 311: Studio Instruction | 2 | C |  |
| MUP 373: Music Theatre: Performance | 1 | C |  |
| MHL OR MTC OR MUP OR MUE Upper Division Elective | 2 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Term hours subtotal: | 14 |  |  |


| Term 8 109-120 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MUP 311: Studio Instruction | 2 | C | - May repeat any MUP 371 or Opera Scenes <br> - Complete one semester of concert attendance with a grade of "pass" if not already completed freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1. <br> - Applicability of transfer credit for studio instruction is determined based on successful completion of audition and review of transcripts. |
| MUP 373: Music Theatre: Performance | 1 | C |  |
| MHL OR MTC OR MUP OR MUE Upper Division Elective | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| MHL OR MTC OR MUP Elective | 3 | C |  |
| Term hours subtotal: | 12 |  |  |

## Notes:

## - Prior to term 1:

- Milestone 1: All students who wish to enroll in an undergraduate music degree program are required to pass an entrance audition in their primary performing medium (instrument or voice) before pursuing a major in the School of Music.
- Milestone 2: All music majors must take the music theory diagnostic exam before registering for classes. Contact the School of Music Undergraduate Office (480.965.5069) for testing information.
- Milestone 3: All music majors (with the exception of those auditioning on keyboard instruments) must take the piano diagnostic exam prior to registering for class piano. Students who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts.
- MUP 194 is for ASU freshman students only. Transfer students must substitute an additional semester of MUP 100 for a total six semesters of MUP 100 .
- Extra sections of MUP 371 are encouraged starting in Term 5

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Performance (Orchestral Instrument), BMUS

Herberger Institute for Design and the Arts
Campus:Tempe
FAMUSPOBM

| Term 1 0-16 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Milestone: School of Music students must successfully complete an entrance audition into the major before enrolling at ASU. |  |  | - See below for entrance Milestone, required for completion prior to Term 1 <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses |
| MUP 194: ASU School of Music Experience | 1 |  |  |
| 4 MUP 127: Studio Instruction | 4 | C |  |
| 1 MUP 494: Instrumental Ensembles | 1 | C |  |
| MTC 125: Basic Music Theory | 3 | C | - ASU Math Placement Exam |
| MUP 131: Class Piano | 1 | C | score determines placement in |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - MUP 194 ASU School of Music Experience - First Year Seminar required of all freshman |
| MAT 142: College Mathematics (MA) | 3 |  | students. Transfer students must |
| Term hours subtotal: | 16 |  | substitute an additional semester of MUP 100 for a total six semesters of MUP 100. <br> - Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered fall semester only: MUP 194, MUP 131, MTC 125 |


| Term 2 17-31 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 MHL 140: Music as Culture (HU \& G) | 3 | C | - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in Term 1. <br> - Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in spring semester only: MTC 221, MUP 132 |
| 1 MUP 127: Studio Instruction | 4 | C |  |
| 4 MUP 494: Instrumental Ensembles | 1 | C |  |
| MTC 221: Music Theory: 18th Century | 3 | C |  |
| MUP 132: Class Piano | 1 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Term hours subtotal: | 15 |  |  |


| Term 3 32-47 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. MUP 127: Studio Instruction | 4 | C | - Complete one semester of concert attendance with a grade of "pass" - freshman complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Complete MTC 125 by end of term 3 |
| 4 MUP 494: Instrumental Ensembles | 1 | C |  |
| 4 MUP 100: Concert Attendance | 0 |  |  |
| MTC 222: Music Theory: 19th Century | 3 | C |  |
| MUP 231: Class Piano | 1 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |

1 Complete First-Year Composition requirement.
Complete Mathematics (MA) requirement.
Term hours subtotal:
16

- Complete MUP 131 by end of term 3
- Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in fall semester only: MTC 222, MUP 231

| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 MUP 127: Studio Instruction | 4 | C | - Complete one semester of concert attendance with a grade of "pass" freshman complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Complete MTC 221 by end of term 4 <br> - Complete MUP 132 by end of term 4 <br> - Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in spring semester only: MTC 223, MUP 232 |
| 4 MUP 494: Instrumental Ensembles | 1 | C |  |
| 1 P MUP 100: Concert Attendance | 0 |  |  |
| MTC 223: Music Theory: 20th Century | 3 | C |  |
| MUP 232: Class Piano | 1 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 5 64-79 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| MHL 341: Music History (HU) |  | 3 | C | - Complete one semester of concert attendance with a grade of "pass" freshman complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Complete MTC 222 by end of term 5 <br> - Complete MUP 231 by end of term 5 <br> - Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in fall semester only: MHL 341, MUP 210 |
| MUP 210: Beginning Instrumental Conducting |  | 1 | C |  |
| MUP 327: Studio Instruction |  | 4 | C |  |
| MUP 379: Chamber Music Ensembles |  | 1 | C |  |
| MUP 494: Instrumental Ensembles |  | 1 | C |  |
| MUP 100: Concert Attendance |  | 0 |  |  |
| MHL OR MTC OR MUP OR MUE Elective |  | 3 |  |  |
| Computer/Statistics/Quantitative Applications (CS) OR MHL 201: Mac Literacy for Musicians (CS) |  | 3 | C |  |
|  | Term hours subtotal: | 16 |  |  |


| Term 6 80-93 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| MHL 342: Music History (HU) |  | 3 | C | - Complete one semester of concert attendance with a grade of "pass" freshman complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Complete MTC 223 by end of term 6 <br> - Complete MUP 232 by end of term 6 <br> - Applicability of transfer credit for ensemble and studio instruction is determined based |
| MUP 100: Concert Attendance |  | 0 |  |  |
| MUP 327: Studio Instruction |  | 4 | C |  |
| MUP 340: Instrumental Conducting |  | 2 | C |  |
| MUP 379: Chamber Music Ensembles |  | 1 | C |  |
| MUP 494: Instrumental Ensembles |  | 1 | C |  |
| MUP 495: Performance |  | 0 |  |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
|  | Term hours subtotal: | 14 |  |  |

- Course offered in spring semester only: MHL 342

| Term 7 94-107 Credit Hours Critical course signified by |  | Hours | Minimum <br> Grade |
| :--- | :---: | :---: | :---: |
| MUP 327: Studio Instruction | 4 | C |  |
| MUP 379: Chamber Music Ensembles | 1 | C |  |
| MUP 451: Repertoire | 2 | C |  |
| MUP 494: Instrumental Ensembles |  | 1 | C |
| MHL 439: Topics in 19th-Century Music (L \& H) OR MHL 440: Music Since 1900 (L or | 3 | C |  |
| HU) OR Upper Division MHL course (L) |  | 3 |  |
| Elective | Term hours subtotal: | 14 |  |

- Complete one semester of concert attendance with a grade of "pass" freshman complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- MHL 439 or 440 recommended to complete the upper division music history elective and upper division literacy and critical inquiry general studies requirement. Otherwise, students must take an upper division MHL elective in term 7 and an upper division literacy and critical inquiry course in term 8 in place of the elective.
- Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts.

| Term 8 | 108-120 Credit Hours Critical course signified by |  | Hours |
| :--- | :--- | :--- | :---: |
| MUP 327: Studio Instruction | Minimum <br> Grade |  |  |
| MUP 379: Chamber Music Ensembles | 4 | C |  |
| MUP 481: Performance Pedagogy and Materials | 1 | C |  |
| MUP 494: Instrumental Ensembles | 2 | C |  |
| MUP 496: Performance |  | 1 | C |
| MHL OR MTC OR MUE OR MUP Upper Division Elective |  | 3 |  |
| Elective | Term hours subtotal: | 13 | C |
|  |  | 2 |  |

- Complete one semester of concert attendance with a grade of "pass" freshman complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- MHL 439 or 440 recommended to complete the upper division music history elective and upper division literacy and critical inquiry general studies requirement. Otherwise, students must take an upper division MHL elective in term 7 and an upper division literacy and critical inquiry course in term 8 in place of the elective.
- Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts.


## Notes:

## - Prior to term 1:

- Milestone 1: All students who wish to enroll in an undergraduate music degree program are required to pass an entrance audition in their primary performing medium (instrument or voice) before pursuing a major in the School of Music.
- Milestone 2: All music majors must take the music theory diagnostic exam before registering for classes. Contact the School of Music Undergraduate Office (480.965.5069) for testing information.
- Milestone 3: All music majors (with the exception of those auditioning on keyboard instruments) must take the piano diagnostic exam prior to registering for class piano. Students who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts.
- MUP 194 is for ASU freshman students only. Transfer students must substitute an additional semester of MUP 100 for a total six semesters of MUP 100 .
- MHL 201 and MHL 440 are recommended electives

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Performance (Voice), BMUS <br> Herberger Institute for Design and the Arts <br> Campus:Tempe <br> FAMUSPVBM

| Term 1-16 Credit Hours Critical course signified by | Hours | Minimum Grade |
| :---: | :---: | :---: |
| Milestone: School of Music students must successfully complete an entrance audition into the major before enrolling at ASU. |  |  |
| 4 MUP 194: ASU School of Music Experience | 1 |  |
| 1. MHL 140: Music as Culture (HU \& G) | 3 | C |
| (1) MUP 127: Studio Instruction | 4 | C |
| 1. MUP 494: Special Topics: Choral Ensemble | 1 | C |
| MTC 125: Basic Music Theory | 3 | C |
| MUP 131: Class Piano | 1 | C |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |

Term hours subtotal:
16

- See below for entrance Milestone, required for completion prior to Term 1
- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics
- MUP 194 ASU School of Music Experience - First Year Seminar required of all freshman students only. Transfer students must substitute an additional semester of MUP 100 for a total of six semesters.
- Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered fall semester only: MUP 194, MUP 131, MTC 125

| Term 2 17-34 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MUP 127: Studio Instruction | 4 | C | - Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in spring semester only: MTC 221, MUP 132 <br> Notes <br> - Complete one semester of concert attendance with a grade of "pass" freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Complete MTC 125 by end of term 3 |
| 4 MUP 494: Special Topics: Choral Ensemble | 1 | C |  |
| MTC 221: Music Theory: 18th Century | 3 | C |  |
| MUP 132: Class Piano | 1 | C |  |
| MUP 100: Concert Attendance | 0 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 18 |  |  |
| Term 3 35-47 Credit Hours Critical course signified by ${ }^{\text {! }}$ | Hours | Minimum Grade |  |
| 4 MUP 127: Studio Instruction | 4 | C |  |
| 4 MUP 250: Diction for Singers | 1 | C |  |
| 4 MUP 494: Special Topics: Choral Ensemble | 1 | C |  |
| FRE 101: Elementary French OR GER 101: Elementary German OR ITA 101: Elementary Italian I | 0-4 | C |  |
| 1. MUP 100: Concert Attendance | 0 |  |  |


| MTC 222: Music Theory: 19th Century | 3 | C |
| :--- | :--- | :--- |
| MUP 231: Class Piano | 1 | C |
| Computer/Statistics/Quantitative Applications (CS) OR | 3 | C |
| MHL 201: Mac Literacy for Musicians (CS) |  |  |
| Complete First-Year Composition requirement. |  |  |
| Complete Mathematics (MA) requirement. | Term hours subtotal: | $13-17$ |

- Complete MUP 131 by end of term 3
- All performance voice students must complete or place out of French 101, German 101 and Italian 101, and one semester of 102 in the language of their choice
- Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in fall semester only: MTC 222, MUP 231



| Term 6 77-91 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| MUP 209: Beginning Choral Conducting |  | 1 | C | - Complete one semester of concert attendance with a grade of "pass" freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Complete or place out of Second Language 101 and 102 by the end of term 6 <br> - Complete MTC 223 by end of term 6 <br> - Complete MUP 132 by end of term 6 <br> - Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Course offered in spring semester only: MHL 342 |
| MHL 342: Music History (HU) |  | 3 | C |  |
| MUP 100: Concert Attendance |  | 0 |  |  |
| MUP 327: Studio Instruction |  | 4 | C |  |
| MUP 495: Performance |  | 0 |  |  |
| MUP 494: Special Topics: Choral Ensemble |  | 1 | C |  |
| MUP 451: Repertoire OR <br> MUP 481: Performance Pedagogy and Materials |  | 2 | C |  |
| FRE 102: Elementary French OR GER 102: Elementary German OR ITA 102: Elementary Italian II |  | 4 | C |  |
|  | Term hours subtotal: | 15 |  |  |


| Term 7 92-107 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MUP 327: Studio Instruction | 4 | C | - Complete one semester of concert attendance with a grade of "pass" if not completed already freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts. |
| MUP 494: Special Topics: Choral Ensemble | 1 | C |  |
| MUP 451: Repertoire OR <br> MUP 453: Song Literature OR <br> MUP 454: Song Literature | 2 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| MHL OR MTC OR MUP Upper Division Elective | 3 | C |  |
| Term hours subtotal: | 16 |  |  |

Term 8 108-122 Credit Hours Critical course signified by 9 Hours | Minimum |
| :---: |
| Grade | Notes

| MUP 327: Studio Instruction | 4 | C |
| :--- | :---: | :---: |
| MUP 494: Special Topics: Choral Ensemble | 1 | 0 |
| MUP 496: Performance | 4 |  |
| Natural Science - Quantitative (SQ) OR | 3 |  |
| Natural Science - General (SG) | 3 | C |
| MHL OR MTC OR MUP Upper Division Elective | 3 |  |
| MHL 439: Topics in 19th-Century Music (L \& H) OR MHL 440: Music Since 1900 (L or |  |  |
| HU) OR Upper Division MHL course (L) |  |  |

- Complete one semester of concert attendance with a grade of "pass" if not completed already freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- MHL 439 or 440 recommended to complete the upper division music history elective and upper division Literacy and Critical Inquiry general studies requirement. Otherwise, students must complete an upper division MHL elective and an upper division Literacy and Critical Inquiry course in place of the upper division music elective in term 8.
- Applicability of transfer credi for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts.


## Notes:

- Prior to term 1:
- Milestone 1: All students who wish to enroll in an undergraduate music degree program are required to pass an entrance audition in their primary performing medium (instrument or voice) before pursuing a major in the School of Music.
- Milestone 2: All music majors must take the music theory diagnostic exam before registering for classes. Contact the School of Music Undergraduate Office (480.965.5069) for testing information.
- Milestone 3: All music majors (with the exception of those auditioning on keyboard instruments) must take the piano diagnostic exam prior to registering for class piano. Students who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts.
- MUP 194 is for ASU freshman students only. Transfer students must substitute an additional semester of MUP 100 for a total six semesters of MUP 100 .
- Depending on level of second language proficiency, this degree may require more than 120 hours.

Total Hours: 122
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4) ARIZONA STATE UNIVERSITY

## 2011-2012 Major Map

## Theatre, BA

Herberger Institute for Design and the Arts
Campus:Tempe
FATHEBA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| (1. THF 125: Orientation to Theatre \& Film | 1 | B- | - See below for entrance Milestone, required for completion prior to Term 1 <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. Theatre majors take THF 125 to fulfill this requirement. <br> - THP 102, 201, and 213 or 214 must be completed by end of term 3. <br> - Students who did not complete the Undergraduate Theatre Interview prior to enrollment must complete this requirement by the end of this term <br> - Minimum 2.5 cumulative GPA in Theatre and Film courses <br> - Minimum 2.0 cumulative ASU GPA |
| THP 102: Acting I: Fundamentals OR THP 213: Introduction to Technical Theatre | 3-4 | C |  |
| THF 126: School of Theatre and Film: First Year Experience | 2 | C |  |
| THP 201: Theatre Production Crew | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Milestone: Students who did not complete the Undergraduate Theatre Interview prior to enrollment must complete this requirement by the end of this term. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 2 17-32 Credit Hours | Hours | Minimum Grade | Notes |
| THP 102: Acting I: Fundamentals OR THP 213: Introduction to Technical Theatre | 4-3 | C | - THF 126 must be completed by term 2 <br> - THP 102, 201, and 213 or 214 must be completed by end of term 3 <br> - Minimum 2.5 cumulative GPA in Theatre and Film courses <br> - Minimum 2.0 cumulative ASU GPA |
| THF 160: Introduction to Storytelling | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16-15 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 THF 220: Principles of Dramatic Analysis | 3 | C | - THF 160 must be completed by term 3 <br> - THP 102, 201, and 213 or 214 must be completed by end of term 3 <br> - Minimum 2.5 cumulative GPA in Theatre and Film courses <br> - Minimum 2.0 cumulative ASU GPA |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Elective | 6 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 49-62 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |



Dramatic Literature
THE 421: Shakespeare: Stage and Film (HU)
THE 422: Latina and Latino Theatre
THE 423: African American Theatre (C)
THE 426: Pre-Columbian Theatre of the Americas

## Notes:

- Prior to term 1:

Milestone: All students who wish to pursue a BA in Theatre must pass the Undergraduate Theatre Interview which includes submission of a creative sample (audition, portfolio or writing sample). Interviews take place in the semester prior to arrival on campus or during the first semester of enrollment.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> Theatre (Acting), BA

Herberger Institute for Design and the Arts
Campus:Tempe
FATHEABA

| Term 1-16 Credit Hours Critical course signified by | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| :---: | :---: | :---: | :---: |
| 4 THF 125: Orientation to Theatre and Film | 1 | B- | - See below for entrance Milestone, required for completion prior to Term 1 <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. Theatre majors complete THF 125 to fulfill this requirement. <br> - THP 102, 201, and 213 or 214 must be completed by end of term 4 . <br> - Students who did not complete the Undergraduate Theatre Interview prior to enrollment must complete this requirement by the end of this term. For more information on the interview process, visit http://theatrefilm.asu.edu/admissions/undergrad/applying/ba_theatre.php <br> - BA Theatre (Acting) requirement: Minimum 3.0 cumulative GPA in Theatre \& Film courses <br> - BA Theatre (Acting) requirement: Minimum 2.5 cumulative ASU GPA |
| 1. THP 102: Acting I: Fundamentals | 3 | B- |  |
| THP 213: Introduction to Technical Theatre OR THP 214: Introduction to Costuming | 4 | C |  |
| THF 126: School of Theatre and Film: First Year Experience | 2 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| Milestone: Students who did not complete the Undergraduate Theatre Interview prior to enrollment must complete this requirement by the end of this term. |  |  |  |
| Term hours subtotal: | $1: 16$ |  |  |


| Term 2 17-32 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| THP 202: Acting II: Realism OR <br> THP 272: Acting: Introduction to Movement OR THP 277: Acting: Introduction to Voice | 3 | B- | - THP 102, 201, and 213 or 214 must be completed by end of term 4 |
| THF 160: Introduction to Storytelling | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - Theatre (Acting) prospective students must complete THP 272 Acting: Intro to Movement, THP |
| Natural Science - Quantitative (SQ) | 4 |  | 277 Acting: Intro to Voice, and THP 202 Acting II: Realism |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  | prior to interview |
| Term hours subtotal: | 16 |  | - BA Theatre (Acting) requirement: Minimum 3.0 cumulative GPA in Theatre \& Film courses <br> - BA Theatre (Acting) requirement: Minimum 2.5 cumulative ASU GPA |


| Term 3 33-48 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| THF 220: Principles of Dramatic Analysis AND Literacy and Critical Inquiry (L) | 3 | C | - THP 102, 201, and 213 or 214 must be completed by end of term 4 <br> - Theatre (Acting) prospective students must complete THP 272 Acting: Intro to Movement, THP 277 Acting: Intro to Voice, and THP 202 Acting II: Scene Study prior to interview |
| THP 202: Acting II: Realism OR <br> THP 272: Acting: Introduction to Movement OR THP 277: Acting: Introduction to Voice | 3 | B- |  |
| THF 215: Visual Literacy Stage and Screen | 3 | C |  |
| THP 201: Theatre Production Crew | 1 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Complete Mathematics (MA) requirement. |  |  |  |
|  | 16 |  |  |


| Term 4 49-62 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: |
| THP 202: Acting II: Realism OR <br> THP 272: Acting: Introduction to Movement OR THP 277: Acting: Introduction to Voice | 3 | B- | - THF 215 must be completed by this term <br> - THP 102, 201, and 213 or 214 must be completed by end of term 4 <br> - Theatre (Acting) prospective students must complete THP 272 Acting: Intro to Movement, THP 277 Acting: Intro to Voice, and THP 202 Acting II: Realism by end of term 4 <br> - Theatre (Acting) prospective students must successfully pass an additional interview and audition at the end of term 4 <br> - BA Theatre (Acting) requirement: Minimum 3.0 cumulative GPA in Theatre \& Film courses <br> - BA Theatre (Acting) requirement: Minimum 2.5 cumulative ASU GPA |
| 4 THP 218: Directing I: Introduction to Directing | 3 | C |  |
| 4. THP 301: Theatre Production | 1 | C |  |
| $\begin{aligned} & \text { Natural Science - Quantitative (SQ) OR } \\ & \text { Natural Science - General (SG) } \end{aligned}$ | 4 |  |  |
| Elective | 3 |  |  |
| Milestone: Successful completion of an additional interview and audition. |  |  |  |
| Term hours subtotal: | 14 |  |  |


| Term 5 63-77 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| THE 320: History of the Theatre I (HU \& H) |  | 3 | C | - Terms 5-8 requirements are for students who passed additional interview and audition for admission to Acting concentration. <br> - BA Theatre (Acting) requirement: Minimum 3.0 cumulative GPA in Theatre \& Film courses <br> - BA Theatre (Acting) requirement: Minimum 2.5 cumulative ASU GPA |
| THP 302: Acting III: Advanced Techniques |  | 3 |  |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Elective |  | 3 |  |  |
| Upper Division Elective |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |


| Term 6 78-92 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| THE 321: History of Theatre (HU \& H) | 3 | C | - BA Theatre (Acting) requirement: Minimum 3.0 cumulative GPA in Theatre \& Film courses <br> - BA Theatre (Acting) requirement: Minimum 2.5 cumulative ASU GPA |
| Upper Division THE Dramatic Literature course | 3 | C |  |
| Complete 2 courses: <br> Upper Division Acting Elective with THP Prefix | 6 | C |  |
| Elective | 3 |  |  |
|  | Term hours subtotal: 15 |  |  |



| Term 8 108-120 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| THP 428: Theatre and the Future | 3 | C | - Transfers students who did not take THF 125 in term 1, take an additional hour of elective credit to complete 120 hours. <br> - BA Theatre (Acting) requirement: Minimum 3.0 |
| THP 489: Acting: Audition Techniques and Career Development | 3 | C |  |
| Humanities, Fine Arts and Design (HU) OR Social and Behavioral Sciences (SB) | 3 |  |  |
| Upper Division Elective | 3 | C |  |


| Elective | $1-2$ |
| :--- | :--- | :--- |


| Dramatic Literature | THP Acting Courses |
| :---: | :---: |
| THE 421: Shakespeare: Stage and Film (HU) | THP 301: Acting Mainstage |
| THE 422: Latina and Latino Theatre | THP 302: Acting III: Advanced Techniques |
| THE 423: African American Theatre (C) | THP 307: Acting: Research and Performance |
| THE 426: Pre-Columbian Theatre of the Americas | THP 377: Acting: Voice and Speech |
|  | THP 387: Acting: TV and Film |
|  | THP 483: Acting: Viewpoints and Composition |
|  | THP 489: Acting: Audition Techniques and Career Development |

## Notes: <br> - Prior to term 1:

Milestone: All students who wish to pursue a BA in Theatre must pass the Undergraduate Theatre Interview which includes submission of a creative sample (audition, portfolio or writing sample). Interviews take place in the semester prior to arrival on campus or during the first semester of enrollment.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

Theatre (Design \& Production), BA
Herberger Institute for Design and the Arts
Campus:Tempe
FADSNPRBA

| Term 1-16 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4. THF 125: Orientation to Theatre and Film | 1 | B- | - See below for entrance Milestone, required for completion prior to Term 1 <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - THP 102, 201 must be completed by term 4 <br> - THP 213 \& 214 must be completed by term 2 <br> - Students who did not complete the Undergraduate Theatre Interview prior to enrollment must complete this requirement by the end of this term. For more information on the interview, visit: theatrefilm.asu.edu/admissions/undergrad/applying/ba_theatre.php <br> - Theatre (Design and Production) requirement: Minimum 3.0 cumulative GPA in Theatre and Film courses <br> - Theatre (Design and Production) requirement: Minimum 2.5 cumulative ASU GPA |
| THP 213: Introduction to Technical Theatre OR THP 214: Introduction to Costuming | 4 | C |  |
| THF 126: The First Year Experience | 2 | C |  |
| THP 102: Acting I: Fundamentals OR THP 201: Theatre Production Crew | 3-1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| Milestone: Students who did not complete the Undergraduate Theatre Interview prior to enrollment must complete this requirement by the end of this term. |  |  |  |
| Term hours subtotal: | 16-14 |  |  |


| Term 2 17-30 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| THP 213: Introduction to Technical Theatre OR THP 214: Introduction to Costuming | 4 | C | - THP 102, 201 must be completed by term 4 <br> - THP 213 \& 214 must be completed by term 2 <br> - BA Theatre (Design and Production) requirement: Prospective Design \& Production concentration students must successfully pass an additional interview and portfolio review at the end of term 2 provided they have completed THP 213 and 214. <br> - Theatre (Design and Production) requirement: Minimum 3.0 cumulative GPA in Theatre and Film courses <br> - Theatre (Design and Production) requirement: Minimum 2.5 cumulative ASU GPA |
| THF 160: Introduction to Storytelling | 3 | C |  |
| THP 102: Acting I: Fundamentals OR THP 201: Theatre Production Crew | 1-3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| 4 Milestone: Successful completion of an additional interview and portfolio review. |  |  |  |
| Term hours subtotal: | 14-16 |  |  |


| Term 3 31-46 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| THF 220: Principles of Dramatic Analysis AND Literacy and Critical Inquiry (L) | 3 | C | - THF 160 must be completed by term 3 |
| THF 215: Visual Literacy for Stage and Screen | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  | - THP 102, 201 must be completed by term 4 |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  | - Theatre (Design and Production) requirement: Minimum 3.0 cumulative GPA in Theatre and |
| Elective | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  | Film courses |
| 4 Complete Mathematics (MA) requirement. |  |  | requirement: Minimum 2.5 |
|  | 16 |  | ative ASU GPA |



| Term 5 61-76 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| THE 320: History of the Theatre I (HU \& H) |  | 3 | C | - Theatre (Design and Production) requirement: Minimum 3.0 cumulative GPA in Theatre and Film courses <br> - Theatre (Design and Production) requirement: Minimum 2.5 cumulative ASU GPA |
| Upper Division Design \& Production Concentration course |  | 3 | C |  |
| THE OR THP Upper Division Elective |  | 3 | C |  |
| THP 401: Theatre Practicum OR Elective |  | 1-2 | C |  |
| Computer/Statistics/Quantitative Applications (CS) |  | 3 |  |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
|  | Term hours subtotal: | 16-17 |  |  |
| Term 6 77-92 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division THE Dramatic Literature course |  | 3 | C | - Theatre (Design and Production) requirement: Minimum 3.0 cumulative GPA in Theatre and Film courses <br> - Theatre (Design and Production) requirement: Minimum 2.5 cumulative ASU GPA |
| THE 321: History of Theatre (HU \& H) |  | 3 | C |  |
| Upper Division Design \& Production Concentration course |  | 3 | C |  |
| THE OR THP Upper Division Elective |  | 3 | C |  |
| THP 401: Theatre Practicum OR Elective |  | 1-2 | C |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 16-17 |  |  |
| Term 7 93-107 Credit Hours |  | Hours | Minimum Grade | Notes |
| THE 440: Experimental Theatre and Performance |  | 3 | C | - Theatre (Design and Production) requirement: Minimum 3.0 cumulative GPA in Theatre and Film courses <br> - Theatre (Design and Production) requirement: Minimum 2.5 cumulative ASU GPA |
| Upper Division Design \& Production Concentration course |  | 3 | C |  |
| THE OR THP Upper Division Elective |  | 3 | C |  |
| Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |


| Term 8 108-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| THP 428: Theatre and the Future |  | 3 | C | - Transfer students who did not take THF 125 in term 1, take an additional hour of elective credit to complete 120 hours. <br> - Theatre (Design and Production) requirement: Minimum 3.0 cumulative GPA in Theatre and Film courses <br> - Theatre (Design and Production) requirement: Minimum 2.5 cumulative ASU GPA |
| Upper Division Design \& Production Concentration course |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) OR Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Upper Division Elective |  | 3 | C |  |
| Elective |  | 1-2 |  |  |
|  | Term hours subtotal: | 13-14 |  |  |


| Dramatic Literature course | Design and Production Concentration Elective |
| :---: | :---: |
| THE 421: Shakespeare: Stage and Film (HU) |  |
| THE 422: Latina and Latino Theatre | THP 317: Stage Management |
|  | THP 340: Scene Design |
| THE 423: African American Theatre (C) |  |
|  | THP 345: Lighting Design |
| THE 426: Pre-Columbian Theatre of the Americas | THP 350: Sound Design |
|  | THP 430: Costume Design |
|  | THP 442: Drawing |
|  | THP 450: Theatre Organization and Management |
|  | THP 494: Technical Direction |
|  | THP 494: Multimedia Design \& Stage |
|  | THP 406: Advanced Scenography |
|  | THP 431: Advanced Costume Construction |
|  | THP 435: Advanced Technical Theatre |
|  | THP 440: Advanced Scene Design |
|  | THP 441: Scene Painting |
|  | THP 445: Advanced Lighting Design |
|  | THP 444: Drafting for the Stage |
|  | THP 494: Advanced Media Design |
|  | THP 494: Digital Portfolio |

Notes:

## - Prior to term 1:

Milestone: All students who wish to pursue a BA in Theatre must pass the Undergraduate Theatre Interview which includes submission of a creative sample (audition, portfolio or writing sample). Interviews take place in the semester prior to arrival on campus or during the first semester of enrollment.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Theory \& Composition (Composition), BMUS

Herberger Institute for Design and the Arts
Campus:Tempe
FAMUSTCBM

| Term 1 0-15 Credit Hours Critical course signified by 9 | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| :---: | :---: | :---: | :---: |
| Milestone: School of Music students must successfully complete an entrance audition into the major before enrolling at ASU. |  |  | - See below for entrance Milestone, required for completion prior to Term 1 <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - MUP 194: ASU School of Music Experience - First Year Seminar required of all freshman students. Transfer students must substitute an additional semester of MUP 100 for a total of six semesters. <br> - Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered fall semester only: MUP 194, MTC 125, MUP 131 |
| 4 MUP 194: ASU School of Music Experience | 1 |  |  |
| 4 MTC 123: Beginning Composition | 1 | C |  |
| 4 MTC 125: Basic Music Theory | 3 | C |  |
| 1 . MUP 111: Studio Instruction | 2 | C |  |
| ! Upper Division MUP 4** Ensemble | 1 | C |  |
| MUP 131: Class Piano | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Term hours subtotal: | 15 |  |  |



| Term 3 3 - 46 Credit Hours Critical course signified by | Hours | Minimum <br> Grade | Notes |
| :--- | :--- | :--- | :--- |
| MTC 123: Beginning Composition | 1 | C |  |
| MTC 222: Music Theory: 19th Century | 3 | C | Complete one semester of <br> concert attendance with a grade <br> of "pass" freshman must <br> complete 5 semesters; transfer |
| MUP 111: Studio Instruction | 2 | C |  |

MUP 100: Concert Attendance 0

| MTC 320: Modal Counterpoint | 2 | C |
| :--- | :---: | :---: |
| MUP 231: Class Piano | 1 | C |
| Natural Science - Quantitative (SQ) | 4 |  |

Complete First-Year Composition requirement.
Complete Mathematics (MA) requirement.
students complete 6 semesters because they do not take MUP 194 in term 1

- Complete MUP 131 by end of term 3
- Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in fall semester only: MTC 222, MUP 231, MTC 320 (odd numbered fall semesters only)

| Term 4 47-62 Credit Hours Critical course signified by | Hours | Minimum Grade |
| :---: | :---: | :---: |
| (1) MTC 223: Music Theory: 20th Century | 3 | C |
| 1 MUP 111: Studio Instruction | 2 | C |
| 1. Upper Division MUP 4** Ensemble | 1 | C |
| 1. MUP 100: Concert Attendance | 0 |  |
| MTC 321: Tonal Counterpoint | 2 | C |
| MUP 232: Class Piano | 1 | C |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |
| Term hours subtotal: | 16 |  |

- Complete one semester of concert attendance with a grade of "pass" freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Complete MUP 132 by end of term 4
- Complete 12 hours of upper division coursework by end of term 5
- Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in spring semester only: MTC 223, MUP 232, MTC 321 (odd numbered spring semesters only)

- Courses offered in fall semester only: MHL 341, MTC 436, MUP 210

| Term 6 78-92 Credit Hours Critical course signified by | Hours | Minimum Grade |
| :---: | :---: | :---: |
| MUP 209: Beginning Choral Conducting | 0 | C |
| MHL 342: Music History (HU) | 3 |  |
| MTC 323: Composition | 2 | C |
| MTC 433: Orchestration | 2 |  |
| MUP 100: Concert Attendance | 0 |  |
| Upper Division MUP $4^{* *}$ Ensemble | 1 | C |
| MUP Studio Instruction or Methods | 1-2 | C |
| Literacy and Critical Inquiry (L) | 3 |  |
| MHL OR MTC OR MUP Elective | 3 |  |
|  | Term hours subtotal: 15-16 |  |

- Complete one semester of concert attendance with a grade of "pass" freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Complete MUP 232 by end of term 6
- Complete 1 semester of conducting by end of term 6; may choose MUP 209 or MUP 210
- Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in spring semester only: MHL 342, MTC 433


| Term 8 108-120 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MTC 323: Composition | 2 | C | - Complete one semester of concert attendance with a grade of "pass" freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - MHL 440 recommended to complete the upper division music history elective and upper division literacy and critical inquiry requirement. Otherwise, students must take an upper division MHL elective in term 7 and an upper division literacy and critical inquiry course in term 8 in place of the elective. |
| MUP 495: Performance | 0 |  |  |
| MTC Upper Division Elective | 2-3 |  |  |
| MHL OR MTC OR MUP Elective | 3 |  |  |
| MHL OR MTC OR MUP Upper Division Elective | 3 |  |  |
| Elective | 3 |  |  |
|  | Term hours subtotal: 13-14 |  |  |

MUP Ensembles
MUP 494: Choral Ensembles
MUP 494: Instrumental Ensembles
MUP 386: Concert Jazz Band, Jazz Repertory
Band, Latin Jazz Ensemble
MUP 379: Jazz Combo
MUP 379: Guitar Ensemble
MUP 379: Piano Ensemble

Notes:

## - Prior to term 1:Â

- Milestone 1: All students who wish to enroll in an undergraduate music degree program are required to pass an entrance audition in their primary performing medium (instrument or voice) before pursuing a major in the School of Music.
- Milestone 2: All music majors must take the music theory diagnostic exam before registering for classes. Contact the School of Music Undergraduate Office (480.965.5069) for testing information.
- Milestone 3: All music majors (with the exception of those auditioning on keyboard instruments) must take the piano diagnostic exam prior to registering for class piano. Students who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts.
- MUP 194 is for ASU freshman students only. Transfer students must substitute an additional semester of MUP 100 for a total six semesters of MUP 100 .
- 

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## Hrs Resident Credit for

Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Theory \& Composition (Theory), BMUS

Herberger Institute for Design and the Arts
Campus:Tempe
FAMUSTTBM

| Term 1 0 - 14 Credit Hours Critical course signified by |  |  |
| :--- | :---: | :---: |
| Milestone: School of Music students must successfully complete an entrance audition into |  |  |
| the major before enrolling at ASU. | Hours | Minimum <br> Grade |
| MUP 194: ASU School of Music Experience | 1 |  |
| MTC 125: Basic Music Theory | 3 |  |
| MUP 111: Studio Instruction | 2 | C |
| Upper Division MUP 4** Ensemble | 1 | C |
| MUP 131: Class Piano | 1 | C |
| ENG 101 or ENG 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107 or ENG 108: English for Foreign Students <br> MAT 142: College Mathematics (MA) | 3 | C |

- See below for entrance Milestone, required for completion prior to Term 1
- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics course
- MUP 194 ASU School of Music Experience - First Year Seminar required of all freshman students. Transfer students must substitute an additional semester of MUP 100 for a total of six semesters.
- Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered fall semester only: MTC 125, MUP 131

| Term 2 15-30 Credit Hours Critical course signified by 9 | Hours | Minimum Grade |
| :---: | :---: | :---: |
| 1 MHL 140: Music as Culture (HU \& G) | 3 | C |
| 1. MTC 221: Music Theory: 18th Century | 3 | C |
| 1 MUP 111: Studio Instruction | 2 | C |
| 1. Upper Division MUP 4** Ensemble | 1 | C |
| MUP 100: Concert Attendance | 0 |  |
| MUP 132: Class Piano | 1 | C |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |
| Term h | 16 |  |

## Notes

- Complete one semester of concert attendance with a grade of "pass" - freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1
- Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in spring semester only: MTC 221, MUP 132

| Term 3 31-45 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4. MTC 222: Music Theory: 19th Century | 3 | C | - Complete one semester of concert attendance with a grade of "pass" freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Complete MUP 131 by end of term 3 |
| 4 MUP 111: Studio Instruction | 2 | C |  |
| 4 Upper Division MUP 4** Ensemble | 1 | C |  |
| 4 MUP 100: Concert Attendance | 0 |  |  |
| MTC 320: Modal Counterpoint | 2 | C |  |
| MUP 231: Class Piano | 1 | C |  |


| Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |
| :--- | :--- | :--- |
| Complete First-Year Composition requirement. |  |  |
| Complete Mathematics (MA) requirement. | Term hours subtotal: | 15 |

- Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in fall semester only: MTC 222, MUP 231, MTC 320 (odd numbered fall semesters only)


| Term 5 62-76 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| MHL 341: Music History (HU) |  | 3 | C | - Complete one semester of concert attendance with a grade of "pass" freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - Complete MUP 231 by end of term 5 <br> - Complete 1 semester of conducting by term 6; may choose MUP 209 or MUP 210 <br> - Must complete four semesters (8 hours) of MUP 111: Studio Instruction. Four additional hours may be selected from 2 additional studio instruction courses or 4 hours of methods courses including MUP 121 and/or MUE 317-338 <br> - Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Courses offered in fall semester only: MHL 341, MTC 425, MUP 210 |
| MTC 425: Studies in 20th-Century Theory |  | 3 | C |  |
| MUP 209: Beginning Choral Conducting OR <br> MUP 210: Beginning Instrumental Conducting |  | 1 | C |  |
| Upper Division MUP 4** Ensemble |  | 1 | C |  |
| MUP Studio Instruction or Methods |  | 1-2 | C |  |
| MUP 100: Concert Attendance |  | 0 |  |  |
| MTC Upper Division Elective |  | 2-3 |  |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) |  | 4 |  |  |
|  | Term hours subtotal: | 15-17 |  |  |


| Term 6 | 77 - 91 Credit Hours Critical course signified by |  | Hours | Minimum <br> Grade |
| :--- | :--- | :--- | :--- | :--- |
| MUP 209: Beginning Choral Conducting | 0 | C | Notes |  |
| MHL 342: Music History (HU) | 3 | C | - Complete one semester of |  |


| MTC 428: Advanced form and Analysis | 3 |  |  |
| :--- | :---: | :---: | :---: |
| MHL OR MTC OR MUP OR MUE Upper Division Elective | 1 |  |  |
| MTC Upper Division Elective | 3 |  |  |
| MUP 100: Concert Attendance | 0 |  |  |
| Upper Division MUP 4** Ensemble | 1 | C |  |
| MUP Studio Instruction or Methods |  | $1-2$ | C |
| Literacy and Critical Inquiry (L) | Term hours subtotal: | $15-16$ |  |
|  |  | 3 |  |

of "pass" freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1

- Complete MUP 232 by end of term 6
- Complete 1 semester of conducting by end of term 6; may choose MUP 209 or MUP 210
- Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts.
- Courses offered in spring semester only: MHL 342, MTC 428 (odd numbered spring semesters only)

| Term 7 92-106 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MTC 323: Composition | 2 | C | - Complete one semester of concert attendance with a grade of "pass" if not yet completed freshman must complete 5 semesters; transfer students complete 6 semesters because they do not take MUP 194 in term 1 <br> - MHL 439 or 440 recommended to complete the upper division music history elective and upper division literacy and critical inquiry general studies requirement. Otherwise, students must take an upper division MHL elective in term 7 and an upper division literacy and critical inquiry course in term 8 in place of the elective. <br> - Applicability of transfer credit for ensemble and studio instruction is determined based on successful completion of audition and review of transcripts. <br> - Course offered in fall semester only: MTC 422 |
| MTC 422: Musical Acoustics | 3 | C |  |
| MTC Upper Division Elective | 5-6 |  |  |
| Upper Division MUP 4** Ensemble $^{*}$ | 1 | C |  |
| MUP Studio Instruction or Methods | 1-2 | C |  |
| MHL 439: Topics in 19th-Century Music (L \& H) OR MHL 440: Music Since 1900 (L or HU) OR MHL Upper Division Elective AND <br> Upper Division Literacy and Critical Inquiry (L) | 3 | C |  |
| Term hours subtotal: | 15-17 |  |  |


MUP Ensembles
MUP 494: Choral Ensembles
MUP 494: Instrumental Ensembles
MUP 386: Concert Jazz Band, Jazz Repertory
Band, Latin Jazz Ensemble
MUP 379: Jazz Combo
MUP 379: Guitar Ensemble
MUP 379: Piano Ensemble

## Notes:

## - Prior to term 1:Â

- Milestone 1: All students who wish to enroll in an undergraduate music degree program are required to pass an entrance audition in their primary performing medium (instrument or voice) before pursuing a major in the School of Music.
- Milestone 2: All music majors must take the music theory diagnostic exam before registering for classes. Contact the School of Music Undergraduate Office (480.965.5069) for testing information.
- Milestone 3: All music majors (with the exception of those auditioning on keyboard instruments) must take the piano diagnostic exam prior to registering for class piano. Students who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts.
- MUP 194 is for ASU freshman students only. Transfer students must substitute an additional semester of MUP 100 for a total six semesters of MUP 100 .
- 

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

Aerospace Engineering (Aeronautics), BSE
Ira A. Fulton Schools of Engineering
Campus:Tempe
ESAEROBSE

| Term 1 0-13 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHM 114: General Chemistry for Engineers (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses. <br> - ASU Math Placement Exam score determines placement in Mathematics course. <br> - ASU 101-MAE and FSE 100 required for freshmen and should be completed first semester. Non-freshmen see Advisor for petitioning replacement electives. <br> - CHM 113 is a prerequisite for CHM 116 and does not apply towards degree credit. <br> - If ENG 105 taken, a 3 hr applicable elective must also be taken prior to graduation. See Advisor. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101-MAE: The ASU Experience | 1 |  |  |
| FSE 100: Intro to Engineering OR School approved elective | 2 | C |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13 |  |  |


| Term 2 14-29 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| 4 PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| 4 PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| BME 111: Engineering Perspectives on Biological Systems OR BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 3-4 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) OR Historical Awareness (H) | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 3 30-43 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 MAE 212: Engineering Mechanics | 4 | C | - CRITICAL REQUIREMENT: Complete 10 critical courses by end of term 3. ENG 101 \& 107 are not part of the this course count. |
| MAT 267: Calculus for Engineers III (MA) | 3 | C |  |
| 4 MAT 275: Modern Differential Equations (MA) | 3 | C |  |
| 4 PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 | C |  |
| 4 PHY 132: University Physics Laboratory II (SQ) | 1 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |


| Term 4 44-58 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4. MAE 213: Solid Mechanics | 3 | C |  |
| 1. MAE 240: Thermofluids I | 4 | C |  |
| EEE 202: Circuits I | 4 | C |  |
| MAE 214: Computer-Aided Engineering I | 1 | C |  |
| MAT 343: Applied Linear Algebra | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 59-74 Credit Hours | Hours | Minimum Grade | Notes |
| MAE 318: Sensors and Controls | 5 | C | - MAE 360 and MAE 362 must be completed to receive (L) credit |
| MAE 322: Structural Mechanics | 4 | C |  |
| MAE 360: Aerodynamics (L) | 4 | C |  |
| MAE 384: Numerical Methods for Engineers (CS) | 3 | C |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 75-90 Credit Hours | Hours | Minimum Grade | Notes |
| MAE 313: Aircraft Dynamics and Control | 3 | C | - MAE 360 and MAE 362 must be completed to receive (L) credit |
| MAE 344: Fundamentals of Aerospace Design | 3 | C |  |
| MAE 362: High-Speed Aerodynamics (L) | 4 | C |  |
| MAE 462: Space Vehicle Dynamics and Control | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |
| MAE 415: Vibration Analysis | 3 | C |  |
| MAE 463: Propulsion | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) OR Historical Awareness (H) | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Upper Division Technical Elective | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| MAE 400: Engineering Profession (L) | 3 | C |  |
| MAE 468: Aerospace Systems Design (L) | 3 | C |  |
| General Elective | 3 | C |  |
| Upper Division Technical Elective | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |

[^12]Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)
- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Aerospace Engineering (Astronautics), BSE

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESAEASBSE


| Term 2 14-29 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 1 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| 4 PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| 4 PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 30-43 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 1 MAE 212: Engineering Mechanics | 4 | C | - CRITICAL REQUIREMENT: Complete 10 critical courses by end of term 3. ENG 101 \& 107 are not part of the this course count. |
| 4 MAT 275: Modern Differential Equations (MA) | 3 | C |  |
| 4 PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 | C |  |
| 1 PHY 132: University Physics Laboratory II (SQ) | 1 | C |  |
| MAT 267: Calculus for Engineers III (MA) | 3 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Minimum |  |  |  |



Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Biomedical Engineering, BSE

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESBMEBSE

| Term 1 0-17 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| BIO 181: General Biology I (SQ) OR <br> CHM 114: General Chemistry for Engineers (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses. <br> - ASU Math Placement Exam score determines placement in Mathematics course. <br> - ASU 101-BME and Intro to Biomedical Engineering I, II, III are required for freshmen and sophomores and should be completed first semester. Non-freshmen and sophomores should complete applicable elective. See Advisor. <br> - CHM 113 is a prerequisite to CHM 116 and does not apply towards degree credit. <br> - If ENG 105 taken, a 3 hr applicable elective must also be taken prior to graduation. See Advisor. <br> Notes <br> - Computation in Biomedical Engineering, MATLAB/Mathcad in BME, and Computational Biostatistics must all be completed to receive (CS) credit. |
| BME 194: Introduction to Biomedical Engineering I OR Elective | 1 | C |  |
| BME 194: Introduction to Biomedical Engineering II OR Elective | 1 | C |  |
| BME 194: Introduction to Biomedical Engineering III OR Elective | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101-BME: The ASU Experience | 1 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| -1 Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 2 18-33 Credit Hours Critical course signified by | Hours | Minimum Grade |  |
| BIO 181: General Biology I (SQ) OR <br> CHM 114: General Chemistry for Engineers (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C |  |
| - BME 194: Applications to Math \& Science to BME I | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |


| MAT 266: Calculus for Engineers II (MA) | 3 | C |
| :--- | :--- | :--- |
| PHY 121: University Physics I: Mechanics (SQ) | 3 | 1 |
| PHY 122: University Physics Laboratory I (SQ) | 1 | C |
| BME 194: Computation in Biomedical Engineering AND <br> Computer/Statistics/Quantitative Applications (CS) | C |  |

Term hours subtotal: 16

| Term 3 34-50 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MAT 267: Calculus for Engineers III (MA) | 3 | C | - CRITICAL REQUIREMENT: Complete 15 critical courses by end of term 3 ( 14 if ENG105 is taken). |
| 4 PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 | C |  |
| 1. PHY 132: University Physics Laboratory II (SQ) | 1 | C |  |
| BME 294: Cell Tissue Physiology | 1 | C |  |
| BME 294: Anatomy \& Physiology: Systems | 1 | C |  |
| BME 294: Anatomy \& Physiology: Tissues | 1 | C |  |
| CHM 231: Elementary Organic Chemistry (SQ) AND <br> CHM 235: Elementary Organic Chemistry Laboratory (SQ) OR <br> CHM 233: General Organic Chemistry I AND <br> CHM 237: General Organic Chemistry Laboratory I | 4 | C |  |

Complete First-Year Composition requirement.
Minimum 2.00 GPA ASU Cumulative.

| Term 4 51-65 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 BME 294: Applications of Math \& Science to BME II | 1 | C | - Computation in Biomedical Engineering, MATLAB/Mathcad in BME, and Computational Biostatistics must all be completed to receive (CS) credit. |
| 1 MAT 275: Modern Differential Equations (MA) | 3 | C |  |
| BME 294: MATLAB/Mathcad in BME AND Computer/Statistics/Quantitative Applications (CS) | 1 |  |  |
| BME 294: Conservation Principles | 1 | C |  |
| BME 294: BME Professional Development I | 1 | C |  |
| EEE 202: Circuits I | 4 | C |  |
| MAE 212: Engineering Mechanics | 4 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 66-81 Credit Hours | Hours | Minimum Grade | Notes |
| BME 394: Numerical Analysis | 1 | C | - Computation in Biomedical Engineering, MATLAB/Mathcad in BME, and Computational Biostatistics must all be completed to receive (CS) credit. |
| BME 394: Biomaterial/ Physiochemical Properties | 1 | C |  |
| BME 394: Biomaterial Implants \& Devices | 1 | C |  |
| BME 394: Basic Concepts for Biological Signals and Systems | 1 | C |  |
| BME 394: Transforms for BME Applications | 1 | C |  |
| BME 394: Microcomputing \& Embedding Systems for BME | 1 | C |  |
| BME 394: Statistics for Biomedical Engineers | 1 | C |  |
| BME 394: Computational Biostatistics AND Upper Division Computer/Statistics/Quantitative Applications (CS) | 1 | C |  |
| BME 394: Probability for Biomedical Engineers | 1 | C |  |
| BME 394: Circuits for BME Instrumentation | 1 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| MAT 343: Applied Linear Algebra | 3 | C |  |
| Term hours subtotal: | 16 |  |  |

Term $682-96$ Credit Hours $\quad$ Hours | Minimum |
| :---: |
| Grade |

| BME 394: Engineering Design Method | 1 | C | - 6 hrs of Professional Electives required. 9 hrs of General Electives required. See Advisor for approved courses. |
| :---: | :---: | :---: | :---: |
| BME 394: 3D Spatial \& Graphic Design/ Modeling | 1 | C |  |
| BME 394: BME Professional Development II | 1 | C |  |
| BME 394: Mass Transport | 1 | C |  |
| BME 394: Momentum Transport | 1 | C |  |
| BME 394: Heat/ Energy Transport | 1 | C |  |
| BME 394: Filters \& Stochastic Process | 1 | C |  |
| BME 394: Design of Experiments \& Clinical Trials | 1 | C |  |
| BME 394: Applications of Math \& Science to BME III | 1 | C |  |
| Lower Division or Upper Division General Elective | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |


| Term 7 97-108 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| BME 494: Capstone I AND <br> Upper Division Literacy and Critical Inquiry (L) | 1 | C | - 6 hrs of Professional Electives required. 9 hrs of General Electives required. See Advisor for approved courses. |
| BME 494: Capstone II AND <br> Upper Division Literacy and Critical Inquiry (L) | 1 | C |  |
| BME 494: Capstone III AND | 1 | C |  |


| BME 494: Instrumentation I |  | 1 | C | - BME Capstone I, II, and III mus all be completed to receive ( L ) credit. |
| :---: | :---: | :---: | :---: | :---: |
| BME 494: Instrumentation II |  | 1 | C |  |
| BME 494: Instrumentation III |  | 1 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Upper Division Professional Elective |  | 3 | C |  |
|  | Term hours subtotal: | 12 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| BME 494: Capstone IV AND <br> Upper Division Literacy and Critical Inquiry (L) |  | 1 | C | - 6 hrs of Professional Electives required. 9 hrs of General Electives required. See Advisor for approved courses. <br> - BME Capstone IV, V, and VI must all be completed to receive (L) credit. |
| BME 494: Capstone V AND <br> Upper Division Literacy and Critical Inquiry (L) |  | 1 | C |  |
| BME 494: Capstone VI AND <br> Upper Division Literacy and Critical Inquiry (L) |  | 1 | C |  |
| Upper Division Professional Elective |  | 3 | C |  |

## Notes:

- Major GPA calculation includes all BME courses.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

| General University Requirements Legend | General Studies Awareness Requirements: |
| :--- | :--- |
| General Studies Core Requirements: | - Cultural Diversity in the U.S. (C) |
| - Literacy and Critical Inquiry (L) | - Global Awareness (G) |
| - Mathematical Studies (MA) |  |
| - Computer/Statistics/Quantitative Applications Awareness (H) |  |
| (CS) | First-Year Composition |
| - Humanities, Fine Arts and Design (HU) |  |
| - Social and Behavioral Sciences (SB) |  |
| - Natural Science - Quantitative (SQ) |  |
| - Natural Science - General (SG) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year

## 4 UNIVERSITY

## 2011-2012 Major Map Chemical Engineering, BSE

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESCHEBSE

| Term 1 $0-16$ Credit Hours Critical course signified by | Hours | Minimum <br> Grade |
| :--- | :--- | :--- | :---: |
| CHE 100: Introduction to Chemical Engineering | 2 | C |
| CHM 113: General Chemistry I (SQ) | 4 | C |
| ENG 101 or ENG 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107 or ENG 108: English for Foreign Students <br> MAT 265: Calculus for Engineers I (MA) | 3 | C |
| ASU 101-CHE: The ASU Experience | 3 | C |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR <br> Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR <br> Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) |  |  |
| Minimum 2.00 GPA ASU Cumulative. | 3 |  |

Term hours subtotal:

- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics course
- ASU 101 or College specific equivalent First Year Seminar required of all freshman students.
- If ENG 105 taken, a 3 hr applicable elective must also be taken prior to graduation. See Advisor.

| Term 2 17-30 Credit Hours Critical course signified by $\%$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. CHM 116: General Chemistry II (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4. MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| 4 PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| 1. PHY 122: University Physics Laboratory I (SQ) | 1 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 31-44 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 1. CHE 211: Introduction to Chemical Processing | 3 | C | EQUI |
| Bioscience Elective | 3 |  | Complete 10 critical courses by |
| MAT 242: Elementary Linear Algebra | 2 |  |  |
| MAT 275: Modern Differential Equations (MA) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| 9. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 4. Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 45-59 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum <br> Grade | Notes |
| 1 CHE 231: Introduction to Transport Phenomena I: Fluids | 3 | C |  |
| 4 MAT 267: Calculus for Engineers III (MA) | 3 | C |  |
| 4 MAE 384: Numerical Methods for Engineers (CS) | 3 | C |  |
| 4 PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 |  |  |


| Term 5 60-75 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHE 334: Introduction to Transport Phenomena II: Heat and Mass Transfer | 3 | C |  |
| CHE 342: Introduction to Applied Chemical Thermodynamics | 3 | C |  |
| CHM 233: General Organic Chemistry I | 3 |  |  |
| CHM 237: General Organic Chemistry Laboratory I | 1 |  |  |
| 2** Level Engineering Elective | 3 |  |  |
| Upper Division Chemistry Content Technical Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 76-90 Credit Hours | Hours | Minimum Grade | Notes |
| CHE 352: Transport Laboratories (L) | 3 | C |  |
| CHE 433: Modern Separations | 3 | C |  |
| CHE 442: Introduction to Chemical Reactor Design | 3 | C |  |
| CHM 234: General Organic Chemistry II | 3 |  |  |
| IEE 220: Business/Industrial Engr | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |
| CHE 432: Principles of Chemical Engineering Design | 3 | C |  |
| CHE 451: Chemical Engineering Laboratory | 3 |  |  |
| CHE 461: Process Dynamic Control (CS) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Upper Division Chemistry Content Technical Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |


| Complete 2 courses: <br> CHE 4** Elective | 6 |  |
| :--- | :---: | :---: |
| CHE 462: Process Design (L) | 3 |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR <br> Upper Division Social and Behavioral Sciences (SB) | 3 |  |
| Upper Division Natural Science or MSE Technical Elective |  | 3 |
|  | Term hours subtotal: | 15 |

- MSE 208 cannot be used to meet the Natural Science or MSE Technical Elective requirement.

| 2** Level Engineering Elective | Bioscience Elective | Natural Science Electives |
| :---: | :---: | :---: |
| BME 2** Elective | BCH 361: Principles of Biochemistry | MSE 3** Elective |
| CEE 2** Elective | BCH 461: General Biochemistry | MSE 4** Elective |
| CSE 2** Elective | BCH 463: Biophysical Chemistry |  |
| ECE 2 ** Elective | BIO 181: General Biology I (SQ) |  |
| EEE 2** Elective | BME 111: Engineering Perspectives on Biological Systems |  |
| IEE 2** Elective | BME 235: Physiology for Engineers |  |
| MAE 2** Elective | BME 235: Physiology for Engineers |  |
|  | BME 318: Biomaterials |  |
| MSE $2^{* *}$ Elective | BME 411: Biomedical Engineering I |  |
|  | CHE 475: Biochemical Engineering |  |
|  | MBB 245: Principles of Molecular and Cellular Biology I (SQ) Academic Catalog Archive 20 | $121045$ |


|  | MBB 247: Principles of Molecular and Cellular Biology II |
| :---: | :---: |
|  | MIC 205: Microbiology (SG) |
|  | MIC 220: Biology of Microorganisms |
| Chemistry Content Techical Elective |  |
| CHM 3** Elective |  |
| BCH 4** Elective |  |
| Notes: |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Civil Engineering, BSE

Ira A. Fulton Schools of Engineering Campus:Tempe
ESCEEBSE

| Term 1-16 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHM 114: General Chemistry for Engineers (SQ) OR CHM 116: General Chemistry II (SQ) | 4 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students and should be completed the first semester. <br> - CHM 113 is a prerequisite for CHM 116 and does not apply toward degree credit. <br> - If ENG 105 is taken, a 3 hr applicable elective must also be taken prior to graduation. See Advisor. |
| 1 FSE 100: Introduction to Engineering | 2 | C |  |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101-CEE: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| ¢ Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {a }}$ |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 4 MAT 242: Elementary Linear Algebra |  | 2 | C |  |
| 4 MAT 266: Calculus for Engineers II (MA) |  | 3 | C |  |
| 4 PHY 121: University Physics I: Mechanics (SQ) |  | 3 | C |  |
| 4. PHY 122: University Physics Laboratory I (SQ) |  | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) OR Social and Behavioral Sciences (SB) |  | 3 |  |  |
| -1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 3 32-44 Credit Hours Critical course signified by ${ }^{\text {d }}$ |  | Hours | Minimum <br> Grade | Notes |
| 1 CEE 210: Engineering Mechanics I: Statics |  | 3 | C | - CRITICAL REQUIREMENT: Complete 12 critical courses by end of term 3. |
| 4 MAT 267: Calculus for Engineers III (MA) |  | 3 | C |  |
| 1. MAT 275: Modern Differential Equations (MA) |  | 3 | C |  |
| 4 PHY 131: University Physics II: Electricity and Magnetism (SQ) |  | 3 | C |  |
| 4 PHY 132: University Physics Laboratory II (SQ) |  | 1 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 13 |  |  |
| Term 4 45-60 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| 4 CEE 212: Engineering Mechanics II: Dynamics |  | 3 | C |  |


| 1. CEE 213: Introduction to Deformable Solids | 3 | C |  |
| :---: | :---: | :---: | :---: |
| BIO 181: General Biology I (SQ) OR <br> BIO 182: General Biology II (SG) OR <br> BME 111: Engineering Perspectives on Biological Systems OR <br> CHM 231: Elementary Organic Chemistry (SQ) OR <br> GLG 101: Introduction to Geology I (Physical) (SQ \& G) | 3 |  |  |
| EEE 202: Circuits I OR <br> MAE 240: Thermofluids I | 4 |  |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) OR ECN 201: Economic Issues and Analysis (SB) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 61-77 Credit Hours | Hours | Minimum Grade | Notes |
| CEE 321: Structural Analysis and Design | 4 | C |  |
| CEE 351: Geotechnical Engineering | 4 | C |  |
| CEE 353: Civil Engineering Materials | 3 | C |  |
| CEE 384: Numerical Methods for Engineers (CS) | 3 | C |  |
| IEE 380: Probability and Statistics for Engineering Problem Solving (CS) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 6 78-92 Credit Hours | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| CEE 300: Engineering Business Practice (L) | 3 | C |  |
| CEE 341: Fluid Mechanics for Civil Engineers | 4 | C |  |
| CEE 361: Introduction to Environmental Engineering | 4 | C |  |
| CEE 372: Transportation Engineering | 4 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 93-107 Credit Hours | Hours | Minimum Grade | Notes |
| CEE 400: Earth Systems Engineering and Management ((L or HU )\& H) | 3 |  |  |
| Complete 3 courses: <br> Upper Division Technical Elective | 9 | C | Elective requirements: Complete a total of 2 design electives and |
| Upper Division Design Elective | 3 | C | 4 technical electives during |
| Term hours subtotal: | 15 |  | Term 7 and Term 8. See Advisor for guidance in selection. |
| Term 8 108-120 Credit Hours | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| CEE 486: Integrated Civil Engineering Design (L) | 4 | C |  |
| Upper Division Design Elective | 3 | C | Elective requirements: Complete |
| Upper Division Technical Elective | 3 | C | a total of 2 design electives and |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  | 4 technical electives during Term 7 and Term 8. See Advisor |
| Term hours subtotal: | 13 |  | in selection |


| Design Elective | Technical Elective |
| :---: | :---: |
| CEE 412: Pavement Analysis and Design | CEE 462: Unit Operations in Environmental Engineering |
| CEE 475: Highway Geometric Design |  |
| CEE 420: Steel Structures | CEE 467: Environmental Microbiology |
|  | CEE 452: Foundations |
| CEE 421: Concrete Structures | CEE 420: Steel Structures |
| CEE 441: Water Resources Engineering |  |
| CEE 466: Urban Water System Design | CEE 421: Concrete Structures |
|  | CEE 423: Structural Design |
| CEE 452: Foundations | CEE 432: Developing Software for Engineering Applications |
| CEE 462: Unit Operations in Environmental |  |
| Engineering |  |

CEE 412: Pavement Analysis and Design
CEE 474: Transportation Systems Planning
CEE 475: Highway Geometric Design
CEE 481: Civil Engineering Project
Management
CEE 483: Highway Materials, Construction,
and Quality
CEE 440: Hydrology
CEE 441: Water Resources Engineering
CEE 466: Urban Water System Design

Notes:

- 2.00 GPA required in all upper division CEE and other approved technical elective courses combined. A maximum of 2 "D" grades allowed in this calculation.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

[^13]General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map <br> Civil Engineering (Construction Engineering), BSE

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESCEECBSE

| Term 1 $10-16$ Credit Hours Critical course signified by | Hours | Minimum <br> Grade |
| :--- | :--- | :--- | :---: |
| CHM 114: General Chemistry for Engineers (SQ) OR | 4 |  |
| CHM 116: General Chemistry II (SQ) | 2 |  |
| FSE 100: Introduction to Engineering | 3 | C |
| MAT 265: Calculus for Engineers I (MA) | 1 | C |
| ASU 101-CEE: The ASU Experience | 3 |  |
| ENG 101 or ENG 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107 or ENG 108: English for Foreign Students | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR <br> Humanities, Fine Arts and Design (HU) AND Global Awareness (G) |  |  |
| Minimum 2.00 GPA ASU Cumulative. | 3 |  |

Term hours subtotal:


| (1) CEE 213: Introduction to Deformable Solids | 3 | C |  |
| :---: | :---: | :---: | :---: |
| BIO 181: General Biology I (SQ) OR <br> BIO 182: General Biology II (SG) OR <br> BME 111: Engineering Perspectives on Biological Systems OR <br> CHM 231: Elementary Organic Chemistry (SQ) OR <br> GLG 101: Introduction to Geology I (Physical) (SQ \& G) | 3 |  |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) OR ECN 201: Economic Issues and Analysis (SB) | 3 |  |  |
| EEE 202: Circuits I | 4 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 61-76 Credit Hours | Hours | Minimum Grade | Notes |
| CEE 384: Numerical Methods for Engineers (CS) | 3 | C |  |
| Complete 3 courses: <br> CEE 300: Engineering Business Practice (L) OR <br> CEE 321: Structural Analysis and Design OR <br> CEE 341: Fluid Mechanics for Civil Engineers OR <br> CEE 351: Geotechnical Engineering OR <br> CEE 353: Civil Engineering Materials OR <br> CEE 361: Introduction to Environmental Engineering OR <br> CEE 372: Transportation Engineering | 10-12 | C |  |
| IEE 380: Probability and Statistics for Engineering Problem Solving (CS) | 3 |  |  |
| Term hours subtotal: | 16-18 |  |  |
| Term 6 77-92 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 4 courses: <br> CEE 300: Engineering Business Practice (L) OR <br> CEE 321: Structural Analysis and Design OR <br> CEE 341: Fluid Mechanics for Civil Engineers OR <br> CEE 351: Geotechnical Engineering OR <br> CEE 353: Civil Engineering Materials OR <br> CEE 361: Introduction to Environmental Engineering OR <br> CEE 372: Transportation Engineering | 16-14 | C |  |
| Term hours subtotal: | 16-14 |  |  |
| Term 7 93-107 Credit Hours | Hours | Minimum Grade | Notes |
| CEE 281: Surveying | 3 | C |  |
| CEE 400: Earth Systems Engineering and Management ((L or HU ) \& H) | 3 | C |  |
| CEE 412: Pavement Analysis and Design OR <br> CEE 483: Highway Materials, Construction, and Quality | 3 | C |  |
| CEE 420: Steel Structures OR CEE 421: Concrete Structures | 3 | C |  |
| CEE 452: Foundations | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 108-120 Credit Hours | Hours | Minimum Grade | Notes |
| CEE 486: Integrated Civil Engineering Design (L) | 4 | C |  |
| CEE 481: Civil Engineering Project Management | 3 | C |  |
| Technical Elective | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| Term hours subtotal: | 13 |  |  |

## Technical Elective

CEE 412: Pavement Analysis and Design
CEE 420: Steel Structures
CEE 421: Concrete Structures
CEE 423: Structural Design
CEE 432: Developing Software for
Engineering Applications

CEE 441: Water Resources Engineering
CEE 462: Unit Operations in Environmental
Engineering
CEE 466: Urban Water System Design
CEE 467: Environmental Microbiology
CEE 474: Transportation Systems Planning
CEE 475: Highway Geometric Design
CEE 483: Highway Materials, Construction, and Quality

## Notes:

- 2.00 GPA required in all upper division CEE and other approved technical elective courses combined. A maximum of 2 " D " grades allowed in this calculation.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> Civil Engineering (Environmental Engineering), BSE

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESCEEEBSE

| Term 1 0-16 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHM 114: General Chemistry for Engineers (SQ) OR CHM 116: General Chemistry II (SQ) | 4 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students and should be completed the first semester. <br> - CHM 113 is a prerequisite to CHM 116 and does not apply towards degree credit <br> - If ENG 105 is taken, then a 3 hr applicable elective must also be taken prior to graduation. See Advisor. |
| 1 FSE 100: Introduction to Engineering | 2 | C |  |
| 1. MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101-CEE: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 2 17-31 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MAT 242: Elementary Linear Algebra | 2 | C |  |
| 4 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| 4 PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| 4 PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| -1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 32-44 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum <br> Grade | Notes |
| 1 CEE 210: Engineering Mechanics I: Statics | 3 | C | - CRITICAL REQUIREMENT: Complete 12 critical courses by end of term 3 |
| 4 MAT 267: Calculus for Engineers III (MA) | 3 | C |  |
| 1. MAT 275: Modern Differential Equations (MA) | 3 | C |  |
| 4 PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 | C |  |
| 4 PHY 132: University Physics Laboratory II (SQ) | 1 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 4 45-60 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 CEE 212: Engineering Mechanics II: Dynamics | 3 | C |  |


| 4 CEE 213: Introduction to Deformable Solids | 3 | C |  |
| :---: | :---: | :---: | :---: |
| BIO 181: General Biology I (SQ) OR <br> BIO 182: General Biology II (SG) OR <br> BME 111: Engineering Perspectives on Biological Systems OR <br> CHM 231: Elementary Organic Chemistry (SQ) OR <br> GLG 101: Introduction to Geology I (Physical) (SQ \& G) | 3 |  |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) OR ECN 201: Economic Issues and Analysis (SB) | 3 |  |  |
| MAE 240: Thermofluids I | 4 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 61-77 Credit Hours | Hours | Minimum Grade | Notes |
| CEE 341: Fluid Mechanics for Civil Engineers | 4 | C |  |
| CEE 353: Civil Engineering Materials | 3 | C |  |
| CEE 361: Introduction to Environmental Engineering | 4 | C |  |
| CEE 384: Numerical Methods for Engineers (CS) | 3 | C |  |
| IEE 380: Probability and Statistics for Engineering Problem Solving (CS) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 6 78-92 Credit Hours | Hours | Minimum Grade | Notes |
| CEE 300: Engineering Business Practice (L) | 3 | C |  |
| CEE 321: Structural Analysis and Design | 4 | C |  |
| CEE 351: Geotechnical Engineering | 4 | C |  |
| CEE 372: Transportation Engineering | 4 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 93-107 Credit Hours | Hours | Minimum Grade | Notes |
| CEE 440: Hydrology | 3 | C |  |
| CEE 466: Urban Water System Design | 3 | C |  |
| CEE 467: Environmental Microbiology | 3 | C |  |
| CEE 400: Earth Systems Engineering and Management ((L or HU )\& H) | 3 | C |  |
| Technical Elective | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 108-120 Credit Hours | Hours | Minimum Grade | Notes |
| CEE 441: Water Resources Engineering | 3 | C |  |
| CEE 462: Unit Operations in Environmental Engineering | 3 | C |  |
| CEE 486: Integrated Civil Engineering Design (L) | 4 | C |  |
| Humanities, Fine Arts and Design (HU) OR Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 13 |  |  |
| Technical Elective |  |  |  |
| CEE 281: Surveying |  |  |  |
| CEE 412: Pavement Analysis and Design |  |  |  |
| CEE 420: Steel Structures |  |  |  |
| CEE 421: Concrete Structures |  |  |  |
| CEE 452: Foundations |  |  |  |
| CEE 474: Transportation Systems Planning |  |  |  |
| CEE 475: Highway Geometric Design |  |  |  |
| CEE 481: Civil Engineering Project Management |  |  |  |

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CEE 483: Highway Materials, Construction,
and Quality
BIO 320: Fundamentals of Ecology
BCH 361: Principles of Biochemistry
CHM 302: Environmental Chemistry
CHM 341: Elementary Physical Chemistry
PUP 442: Environmental Planning
PUP 475: Environmental Impact Assessment
CEE 499: Individualized Instruction
```


## Notes:

- 2.00 GPA required in all upper division CEE and other approved technical elective courses combined. A maximum of 2 "D" grades allowed in this calculation.

| Total Hours: 120 | General University Requirements Legend | General Studies Awareness Requirements: |
| :--- | :--- | :--- |
| Upper Division Hours: 45 minimum | General Studies Core Requirements: | - Cultural Diversity in the U.S. (C) |
| Major GPA: 2.00 minimum | - Literacy and Critical Inquiry (L) | - Global Awareness (G) |
| Cumulative GPA: 2.00 minimum | - Mathematical Studies (MA) | - Historical Awareness (H) |
| Total hrs at ASU: 30 minimum | - Computer/Statistics/Quantitative Applications |  |
| Hrs Resident Credit for | (CS) | First-Year Composition |
| Academic Recognition: 56 minimum | - Humanities, Fine Arts and Design (HU) |  |
| Total Community College Hrs: 64 maximum | - Social and Behavioral Sciences (SB) |  |
|  | - Natural Science - Quantitative (SQ) |  |
|  | - Natural Science - General (SG) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4 <br> UNIVERSITY

## 2011-2012 Major Map

## Civil Engineering (Sustainable Engineering), BSE

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESCEESUBSE

| Term 1 0-16 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHM 114: General Chemistry for Engineers (SQ) OR CHM 116: General Chemistry II (SQ) | 4 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students and should be completed the first semester. <br> - CHM 113 is a prerequisite to CHM 116 and does not apply towards degree credit. <br> - If ENG 105 is taken, a 3 hr applicable elective must also be taken prior to graduation. See Advisor. |
| 4 FSE 100: Introduction to Engineering | 2 | C |  |
| 1 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101-CEE: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR <br> Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| 4 Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 2 17-31 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| (1) MAT 242: Elementary Linear Algebra | 2 | C |  |
| 4. MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| 9 PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| 4 PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| CEE 181: Introduction to Sustainable Engineering: Technological, Social, \& Sustainable System | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 32-44 Credit Hours Critical course signified by 9 | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| 1 CEE 210: Engineering Mechanics I: Statics | 3 | C | - CRITICAL REQUIREMENT: Complete 12 critical courses by end of term 3 |
| 1 MAT 267: Calculus for Engineers III (MA) | 3 | C |  |

Term 4 45-60 Credit Hours Critical course signified by
Term hours subtotal:
13

Complete 12 critical courses by end of term 3

Hours \begin{tabular}{ccc}

| Minimum |
| :---: |
| Grade | \& Notes <br>

3 \& C \& <br>
\hline
\end{tabular}



CEE 481: Civil Engineering Project
Management
CEE 483: Highway Materials, Construction, and Quality

BIO 320: Fundamentals of Ecology
CHM 302: Environmental Chemistry
CHM 341: Elementary Physical Chemistry
PUP 442: Environmental Planning
PUP 475: Environmental Impact Assessment
CEE 499: Individualized Instruction

## Notes:

- 2.00 GPA required in all upper division CEE and other approved technical elective courses combined. A maximum of 2 "D" grades allowed in this calculation.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Computer Science, BS

Ira A. Fulton Schools of Engineering Campus:Tempe
ESCSEBS

| Term 1 0-15 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 CSE 110: Principles of Programming with Java (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman student and should be taken the first semester. <br> - If ENG 105 is taken, a 3 credit hour applicable elective must also be taken prior to graduation. See advisor. |
| 1 FSE 100: Introduction to Engineering | 2 | C |  |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101-CSE: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |


| Term 2 16-31 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CSE 205: Object-Oriented Programming and Data Structures (CS) | 3 | C | - General Elective cannot include CSE, MAT, PHY, BIO, CHM or other Science course. |
| 4 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| General Elective | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 4. CSE 120: Digital Design Fundamentals | 3 | C | - CRITICAL REQUIREMENT: Complete 8 critical courses by end of term 3 . |
| 4 MAT 243: Discrete Mathematical Structures | 3 | C |  |
| 4 MAT 267: Calculus for Engineers III (MA) | 3 | C |  |

Lab Science Requirement 4

Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR
Humanities, Fine Arts and Design (HU) AND Historical Awareness (H)
3

Complete First-Year Composition requirement.
Minimum 2.00 GPA ASU Cumulative.
Term hours subtotal: 16
$\left.\begin{array}{ll|c}\text { Term } 4 & 48-63 \text { Credit Hours Critical course signified by } & \text { Hours }\end{array} \begin{array}{c}\text { Minimum } \\ \text { Grade }\end{array}\right]$


[^14]AST 321: Introduction to Planetary and
Stellar Astrophysics (SQ)AND AST 113:
Astronomy Laboratory I (SQ)
AST 322: Introduction to Galactic and
Extragalactic Astrophysics (SQ)AND AST
114: Astronomy Laboratory II (SQ)

## Notes:

- Major GPA calculation includes FSE 100, IEE 380, MAT 343, Technical Electives, and all CSE courses.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Computer Science (Information Assurance), BS

Ira A. Fulton Schools of Engineering Campus:Tempe
ESCSEIBS

| Term 1 0-15 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 CSE 110: Principles of Programming with Java (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101-CSE should be taken first semester. <br> - If ENG 105 is taken, a 3 credit hour applicable elective must also be taken prior to graduation. See advisor. |
| 4 FSE 100: Introduction to Engineering | 2 | C |  |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101-CSE: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 2 16-31 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 4 CSE 205: Object-Oriented Programming and Data Structures (CS) | 3 | C | - General Elective cannot include CSE, MAT, PHY, BIO, CHM or other Science course. |
| 4 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Elective | 3 |  |  |
| 9. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 CSE 120: Digital Design Fundamentals | 3 | C | - CRITICAL REQUIREMENT: Complete 8 critical courses by end of term 3 . |
| 4 MAT 243: Discrete Mathematical Structures | 3 | C |  |
| 4. MAT 267: Calculus for Engineers III (MA) | 3 | C |  |

Lab Science Requiremen
Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR
Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR
Humanities, Fine Arts and Design (HU) AND Historical Awareness (H)
Complete First-Year Composition requirement.
Minimum 2.00 GPA ASU Cumulative.
Term hours subtotal: 16

| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 CSE 230: Computer Organization and Assembly Language Programming | 3 | C |  |
| 4 CSE 240: Introduction to Programming Languages | 3 | C |  |
| MAT 343: Applied Linear Algebra | 3 |  |  |
| Lab Science Requirement | 4 |  |  |


Lab Science Requirements
PHY 121: University Physics I: Mechanics
(SQ)AND PHY 122: University Physics
Laboratory I (SQ)
PHY 131: University Physics II: Electricity
and Magnetism (SQ)AND PHY 132:
University Physics Laboratory II (SQ)
CHM 113: General Chemistry I (SQ)AND
CHM 116: General Chemistry II (SQ)
GLG 101: Introduction to Geology I
(Physical) (SQ \& G)AND GLG 103:
Introduction to Geology I-Laboratory (SQ)

GLG 102: Introduction to Geology II
(Historical) (SG \& H)AND GLG 104:
Introduction to Geology II-Laboratory (SG)
AST 321: Introduction to Planetary and
Stellar Astrophysics (SQ)AND AST 113
Astronomy Laboratory I (SQ)
AST 322: Introduction to Galactic and
Extragalactic Astrophysics (SQ)AND AST
114: Astronomy Laboratory II (SQ)

## Notes:

- Major GPA calculation includes FSE 100, IEE 380, MAT 343, and all CSE courses.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year

## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map

## Computer Science (Software Engineering), BS

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESCSESBS

| Term 1 0-15 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 CSE 110: Principles of Programming with Java (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101-CSE should be taken first semester. <br> - If ENG 105 is taken, a 3 credit hour applicable elective must also be taken prior to graduation. See advisor. |
| 4 FSE 100: Introduction to Engineering | 2 | C |  |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101-CSE: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 2 16-31 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 1 CSE 205: Object-Oriented Programming and Data Structures (CS) | 3 | C | - General Elective cannot include CSE, MAT, PHY, BIO, CHM or other Science course. |
| 1 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| General Elective | 3 |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 4 CSE 120: Digital Design Fundamentals | 3 | C | - CRITICAL REQUIREMENT: Complete 8 critical courses by end of term 3 . |
| 1. MAT 243: Discrete Mathematical Structures | 3 | C |  |
| 4 MAT 267: Calculus for Engineers III (MA) | 3 | C |  |


| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR |  |  |  |
| :---: | :---: | :---: | :---: |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) |  |  |  |
| Lab Science Requirement | 4 |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Minimum Grade | Notes |
| 1. CSE 230: Computer Organization and Assembly Language Programming | 3 | C |  |
| 1 CSE 240: Introduction to Programming Languages | 3 | C |  |
| Lab Science Requirement | 4 |  |  |
| MAT 343: Applied Linear Algebra | 3 | C |  |


| Term 5 64-76 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CSE 301: Computing Ethics | 1 | C |  |
| CSE 310: Data Structures and Algorithms | 3 | C |  |
| CSE 360: Introduction to Software Engineering | 3 | C |  |
| IEE 380: Probability and Statistics for Engineering Problem Solving (CS) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 6 77-91 Credit Hours | Hours | Minimum Grade | Notes |
| CSE 340: Principles of Programming Languages | 3 | C | - See Advisor or http://engineering.asu.edu/cidse for list of Technical Electives. |
| CSE 355: Introduction to Theoretical Computer Science | 3 | C |  |
| CSE 445: Distributed Software Development | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Upper Division Technical Elective | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 92-105 Credit Hours | Hours | Minimum Grade | Notes |
| CSE 430: Operating Systems | 3 | C | - General Elective cannot include CSE, MAT, PHY, BIO, CHM or other Science course. |
| CSE 460: Software Analysis and Design | 3 | C |  |
| CSE 461: Software Engineering Project I (L) | 3 | C |  |
| CSE 485: Computer Science Capstone Project I (L) | 3 | C |  |
| General Elective | 2 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| CSE 462: Software Engineering Project II (L) | 3 | C | - See Advisor or http://engineering.asu.edu/cidse for list of Technical Electives. |
| CSE 463: Introduction to Human Computer Interaction OR <br> CSE 465: Information Assurance OR <br> CSE 466: Computer Systems Security OR <br> CSE 467: Data and Information Security OR <br> CSE 468: Computer Network Security | 3 | C |  |
| CSE 486: Computer Science Capstone Project II (L) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) OR Social and Behavioral Sciences (SB) | 3 |  |  |
| Upper Division Technical Elective | 3 | C |  |
| Term hours subtotal: | 15 |  |  |

Lab Science Requirements
PHY 121: University Physics I: Mechanics
(SQ)AND PHY 122: University Physics
Laboratory I (SQ)
PHY 131: University Physics II: Electricity
and Magnetism (SQ)AND PHY 132:
University Physics Laboratory II (SQ)
CHM 113: General Chemistry I (SQ)AND
CHM 116: General Chemistry II (SQ)
GLG 101: Introduction to Geology I
(Physical) (SQ \& G)AND GLG 103:
Introduction to Geology I-Laboratory (SQ)

GLG 102: Introduction to Geology II
(Historical) (SG \& H)AND GLG 104:
Introduction to Geology II-Laboratory (SG)
AST 321: Introduction to Planetary and
Stellar Astrophysics (SQ)AND AST 113
Astronomy Laboratory I (SQ)
AST 322: Introduction to Galactic and
Extragalactic Astrophysics (SQ)AND AST
114: Astronomy Laboratory II (SQ)

## Notes:

- Major GPA calculation includes FSE 100, IEE 380, MAT 343, and all CSE courses

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4 UNIVERSITY

## 2011-2012 Major Map

Computer Systems Engineering, BSE
Ira A. Fulton Schools of Engineering
Campus:Tempe
ESCSEBSE

| Term 1 0-15 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CSE 110: Principles of Programming with Java (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course |
| 4 FSE 100: Introduction to Engineering | 2 | C |  |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101-CSE: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - ASU 101 or College specific equivalent First Year Seminar required of all freshman student and should be taken the first semester |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  | - If ENG 105 is taken, a 3 hour applicable elective must also be |
| Term hours subtotal: | 15 |  | taken prior to graduation. See Advisor. |


| Term 2 16-31 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 CSE 205: Object-Oriented Programming and Data Structures (CS) | 3 | C |  |
| 4. MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 32-44 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 1. CSE 120: Digital Design Fundamentals | 3 | C | - CRITICAL REQUIREMENT: Complete 8 critical courses by end of term 3 |
| 4 MAT 243: Discrete Mathematical Structures | 3 | C |  |
| 1. MAT 267: Calculus for Engineers III (MA) | 3 | C |  |
| PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 4 45-60 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 1. CSE 220: Programming for Computer Engineering | 3 | C |  |
| 1. CSE 230: Computer Organization and Assembly Language Programming | 3 | C |  |
| MAT 275: Modern Differential Equations (MA) | 3 |  |  |
| PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 |  |  |



## Notes:

- Major GPA calculation includes EEE 202, EEE 334, FSE 100, IEE 380, MAT 343, and all CSE courses.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map

## Computer Systems Engineering (Information Assurance), BSE

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESCSEIBSE

| Term 1 0-15 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 CSE 110: Principles of Programming with Java (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101-CSE should be completed first semester. <br> - If ENG 105 is taken, a 3 hour applicable elective must also be taken prior to graduation. See Advisor. |
| 1 FSE 100: Introduction to Engineering | 2 | C |  |
| 1 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101-CSE: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| 4 Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 2 16-31 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 1 CSE 205: Object-Oriented Programming and Data Structures (CS) | 3 | C |  |
| 1 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |

Term hours subtotal: 16

| Term 3 32-44 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CSE 120: Digital Design Fundamentals | 3 | C | - CRITICAL REQUIREMENT: Complete 8 critical courses by end of term 3 |
| 4 MAT 243: Discrete Mathematical Structures | 3 | C |  |
| 4 MAT 267: Calculus for Engineers III (MA) | 3 | C |  |
| PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 4 45-60 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |


| CSE 220: Programming for Computer Engineering | 3 | C |
| :--- | :---: | :---: |
| CSE 230: Computer Organization and Assembly Language Programming | 3 | C |
| MAT 275: Modern Differential Equations (MA) | 3 |  |
| PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 |  |
| PHY 132: University Physics Laboratory II (SQ) | 1 |  |


| Term 5 61-74 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CSE 301: Computing Ethics | 1 | C |  |
| CSE 310: Data Structures and Algorithms | 3 | C |  |
| CSE 360: Introduction to Software Engineering | 3 | C |  |
| EEE 202: Circuits I | 4 |  |  |
| IEE 380: Probability and Statistics for Engineering Problem Solving (CS) | 3 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 6 75-90 Credit Hours | Hours | Minimum Grade | Notes |
| CSE 320: Design and Synthesis of Digital Hardware | 3 | C |  |
| CSE 325: Embedded Microprocessor Systems | 3 | C |  |
| EEE 334: Circuits II | 4 |  |  |
| MAT 343: Applied Linear Algebra | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |
| CSE 423: Systems Capstone Project I (L) | 3 | C |  |
| CSE 430: Operating Systems | 3 | C |  |
| CSE 465: Information Assurance | 3 | C |  |
| CSE 466: Computer Systems Security | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| CSE 420: Computer Architecture I | 3 | C |  |
| CSE 424: Systems Capstone Project II (L) | 3 | C |  |
| CSE 434: Computer Networks | 3 | C |  |
| CSE 467: Data and Information Security | 3 | C |  |
| CSE 468: Computer Network Security | 3 | C |  |
| Term hours subtotal: | 15 |  |  |

## Notes:

## - Major GPA calculation includes EEE 202, EEE 334, FSE 100, IEE 380, MAT 343, and all CSE courses.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map Construction Engineering, BSE

Ira A. Fulton Schools of Engineering Campus:Tempe
ESCONBSE

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 FSE 100: Introduction to Engineering | 2 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101-CON should be completed the first semester. <br> - CHM 113 is a prerequisite for CHM 116 and does not apply toward degree credit. <br> If ENG 105 is taken, a 3 hr applicable elective must also be taken prior to graduation. See Advisor. |
| 1 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101-CON: The ASU Experience | 1 |  |  |
| CHM 114: General Chemistry for Engineers (SQ) OR CHM 116: General Chemistry II (SQ) | 4 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 2 17-31 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MAT 242: Elementary Linear Algebra | 2 | C |  |
| 4. MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| 4 PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| 4. PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| CON 101: Construction and Culture: a Built Environment (HU \& H \& G) | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 1. CEE 210: Engineering Mechanics I: Statics | 3 | C | - CRITICAL REQUIREMENT: Complete 10 critical courses by end of term 3. |
| 4 MAT 267: Calculus for Engineers III (MA) | 3 | C |  |
| 4 PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 | C |  |
| 4 PHY 132: University Physics Laboratory II (SQ) | 1 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) OR ECN 201: Economic Issues and Analysis (SB) | 3 |  |  |
| MAT 275: Modern Differential Equations (MA) | 3 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| -. CEE 212: Engineering Mechanics II: Dynamics | 3 | C |  |



CEE 423: Structural Design
CEE 432: Developing Software for
Engineering Applications
CEE 412: Pavement Analysis and Design
CEE 474: Transportation Systems Planning
CEE 475: Highway Geometric Design
CEE 481: Civil Engineering Project
Management
CEE 483: Highway Materials, Construction,
and Quality
CEE 440: Hydrology
CEE 441: Water Resources Engineering
CEE 466: Urban Water System Design
CON 296: Field Internship
CON 310: Testing of Materials for
Construction
CON 345: Mechanical Systems

## Notes:

- Major GPA calculation includes all upper division CON and CIM courses.
- 2.00 GPA required in all upper division CON and approved technical elective courses combined. A maximum of 2 "D" grades allowed in this calculation.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Construction Management (Concrete Industry Management),BS

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESCONIMBS

| Term 1 0-16 Credit Hours Critical course signified by 9 . | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CIM 105: Introduction to the Concrete Industry | 2 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course. <br> - ASU 101-CON should be completed first semester. <br> - If ENG 105 taken, a 3 hr applicable elective must also be taken prior to graduation. See Advisor. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| ASU 101-CON: The ASU Experience | 1 |  |  |
| CON 101: Construction and Culture: a Built Environment (HU \& H \& G) | 3 | C |  |
| MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| PHY 111: General Physics (SQ) | 3 | C |  |
| PHY 113: General Physics Laboratory (SQ) | 1 | C |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-34 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| 4 CIM 106: Fundamentals of Concrete: Properties and Testing | 4 | C | - If ENG 105 a 3 hr applicable elective must also be taken prior to graduation. See Advisor. |
| 4 STP 226: Elements of Statistics (CS) | 3 |  |  |
| CON 243: Heavy Construction Equipment, Methods, and Materials | 3 | C |  |
| CON 244: Working Drawing Analysis | 2 | C |  |
| CON 252: Building Construction Methods, Materials, and Equipment | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 18 |  |  |
| Term 3 35-49 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| 4 CIM 205: Concrete Construction Methods | 3 | C | - CRITICAL REQUIREMENT: <br> Complete 8 critical courses by end of term 3. ENG 102 \& 108 are not part of the this course count. |
| 4 COM 225: Public Speaking (L) | 3 |  |  |
| 4 CON 221: Applied Statics | 3 | C |  |
| 4 ECN 211: Macroeconomic Principles (SB) | 3 |  |  |
| CON 251: Microcomputer Applications for Construction | 3 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 50-64 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| 1. CIM 206: Application of Concrete in Construction | 3 | C |  |
| 4 CON 271: Construction Safety | 3 | C |  |
| 4 ECN 212: Microeconomic Principles (SB) | 3 |  |  |
| CON 223: Strength of Materials | 3 | C |  |


| Summer 4 65-65 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CON 296: Field Internship | 1 | C |  |
| Term hours subtotal: | 1 |  |  |
| Term 5 66-82 Credit Hours | Hours | Minimum Grade | Notes |
| CIM 305: Management of Concrete Products: Ordering and Delivering | 3 |  |  |
| CON 241: Surveying | 3 | C |  |
| CON 383: Construction Estimating | 4 |  |  |
| $\begin{aligned} & \text { Natural Science - Quantitative (SQ) OR } \\ & \text { Natural Science - General (SG) } \end{aligned}$ | 4 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 6 83-94 Credit Hours | Hours | Minimum Grade | Notes |
| CIM 306: Management of Concrete Products: Production Facilities | 3 |  |  |
| CON 389: Construction Cost Accounting and Control (CS) | 3 |  |  |
| CON 450: Geotechnical Applications for Construction | 3 |  |  |
| LES 305: Legal, Ethical, and Regulatory Issues in Business | 3 |  |  |
| Term hours subtotal: | 12 |  |  |
| Summer 6 95-95 Credit Hours | Hours | Minimum Grade | Notes |
| CON 484: Internship | 1 |  |  |
| Term hours subtotal: | 1 |  |  |
| Term 7 96-107 Credit Hours | Hours | Minimum Grade | Notes |
| CIM 405: Concrete Problems: Diagnosis, Prevention, and Dispute | 3 |  |  |
| CON 453: Construction Project Management I | 3 |  |  |
| CON 495: Construction Planning and Scheduling (CS) | 3 |  |  |
| CIM Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 12 |  |  |
| Term 8 108-120 Credit Hours | Hours | Minimum Grade | Notes |
| CIM 406: Concrete Industry Management Capstone | 4 |  |  |
| CON 424: Structural Design | 3 |  |  |
| CON 455: Construction Project Management II | 3 |  |  |
| CON 496: Construction Contract Administration (L) | 3 |  |  |
| Term hours subtotal: | 13 |  |  |

## Notes:

- Major GPA calculation includes all upper division CON and CIM courses.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

Hrs Resident Credit for

- Computer/Statistics/Quantitative Applications
(CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Construction Management (General Building Construction),BS

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESCONGBS

| Term 1 0-16 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CON 100: Introduction to Construction | 2 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course. <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman student and should be taken the first semester. <br> - If ENG 105 taken, a 3 hr applicable elective must also be taken prior to graduation. See Advisor. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| 4 PHY 111: General Physics (SQ) | 3 | C |  |
| 4 PHY 113: General Physics Laboratory (SQ) | 1 | C |  |
| ASU 101-CON: The ASU Experience | 1 |  |  |
| CON 101: Construction and Culture: a Built Environment (HU \& H \& G) | 3 | C |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-30 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| 1 CON 243: Heavy Construction Equipment, Methods, and Materials | 3 | C |  |
| 4 CON 244: Working Drawing Analysis | 2 | C |  |
| 1. CON 252: Building Construction Methods, Materials, and Equipment | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 COM 225: Public Speaking (L) | 3 |  | - CRITICAL REQUIREMENT: Complete 13 critical courses by end of term 3 |
| 1 CON 221: Applied Statics | 3 | C |  |
| 4 CON 251: Microcomputer Applications for Construction | 3 | C |  |
| 1. ECN 212: Microeconomic Principles (SB) | 3 |  |  |
| 4 STP 226: Elements of Statistics (CS) | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 46-61 Credit Hours Critical course signified by 4 | Hours | Minimum Grade | Notes |
| 1 CON 223: Strength of Materials | 3 | C |  |
| 4 CON 271: Construction Safety | 3 | C |  |
| CON 241: Surveying | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 |  |  |


| Summer 4 62-62 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CON 296: Field Internship | 1 | C |  |
| Term hours subtotal: | 1 |  |  |
| Term 5 63-80 Credit Hours | Hours | Minimum Grade | Notes |
| CON 273: Electrical Construction Fundamentals and Project Management | 3 | C |  |
| CON 310: Testing of Materials for Construction | 4 |  |  |
| CON 345: Mechanical Systems | 4 |  |  |
| CON 383: Construction Estimating | 4 |  |  |
| CON 472: Development Feasibility Reports (L) OR CON 483: Advanced Building Estimating OR REA 380: Real Estate Fundamentals OR Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 18 |  |  |
| Term 6 81-95 Credit Hours | Hours | Minimum Grade | Notes |
| CON 389: Construction Cost Accounting and Control (CS) | 3 |  |  |
| CON 472: Development Feasibility Reports (L) OR CON 483: Advanced Building Estimating OR REA 380: Real Estate Fundamentals OR Upper Division Elective | 3 |  |  |
| LES 305: Legal, Ethical, and Regulatory Issues in Business | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Summer 6 96-96 Credit Hours | Hours | Minimum Grade | Notes |
| CON 484: Internship | 1 |  |  |
| Term hours subtotal: | 1 |  |  |
| Term 7 97-108 Credit Hours | Hours | Minimum Grade | Notes |
| CON 450: Geotechnical Applications for Construction | 3 |  |  |
| CON 453: Construction Project Management I | 3 |  |  |
| CON 495: Construction Planning and Scheduling (CS) | 3 |  |  |
| CON 472: Development Feasibility Reports (L) OR CON 483: Advanced Building Estimating OR REA 380: Real Estate Fundamentals OR Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 12 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| CON 424: Structural Design | 3 |  |  |
| CON 455: Construction Project Management II | 3 |  |  |
| CON 496: Construction Contract Administration (L) | 3 |  |  |
| CON 472: Development Feasibility Reports (L) OR CON 483: Advanced Building Estimating OR REA 380: Real Estate Fundamentals OR Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 12 |  |  |

- Major GPA calculation includes all upper division CON and CIM courses.

| Total Hours: 120 | General University Requirements Legend | General Studies Awareness Requirements: |
| :--- | :--- | :--- |
| Upper Division Hours: 45 minimum | General Studies Core Requirements: | - Cultural Diversity in the U.S. (C) |
| Major GPA: 2.00 minimum | - Literacy and Critical Inquiry (L) | - Global Awareness (G) |
| Cumulative GPA: 2.00 minimum | - Mathematical Studies (MA) | - Historical Awareness (H) |
| Total hrs at ASU: 30 minimum | - Computer/Statistics/Quantitative Applications |  |
| Hrs Resident Credit for | (CS) | First-Year Composition |
| Academic Recognition: 56 minimum | - Humanities, Fine Arts and Design (HU) |  |
| Total Community College Hrs: 64 maximum | - Social and Behavioral Sciences (SB) |  |
|  | - Natural Science - Quantitative (SQ) |  |
|  | - Natural Science - General (SG) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Construction Management (Heavy Construction), BS

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESCONHBS

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CON 100: Introduction to Construction | 2 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| 4 PHY 111: General Physics (SQ) | 3 | C | Mathematics course. <br> - ASU 101 or College specific |
| 1 PHY 113: General Physics Laboratory (SQ) | 1 | C | - ASU 101 or College specific equivalent First Year Seminar required of all freshman student and should be taken the first semester. |
| ASU 101-CON: The ASU Experience | 1 |  |  |
| CON 101: Construction and Culture: a Built Environment (HU \& H \& G) | 3 | C |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  | - If ENG 105 taken, a 3 hr applicable elective must also be taken prior to graduation. See Advisor. |
| Term hours subtotal: | 16 |  |  |


| Term 2 17-30 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. CON 243: Heavy Construction Equipment, Methods, and Materials | 3 | C |  |
| 4. CON 244: Working Drawing Analysis | 2 | C |  |
| 1 CON 252: Building Construction Methods, Materials, and Equipment | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| (1) Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 COM 225: Public Speaking (L) | 3 |  | IREMENTS: |
| 1. CON 221: Applied Statics | 3 | C | Complete 13 critical courses by |
| 1. CON 251: Microcomputer Applications for Construction | 3 | C |  |
| 4 ECN 212: Microeconomic Principles (SB) | 3 |  |  |
| 1 STP 226: Elements of Statistics (CS) | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 46-61 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Minimum <br> Grade | Notes |
| 1 CON 223: Strength of Materials | 3 | C |  |
| 1 CON 271: Construction Safety | 3 | C |  |
| CON 241: Surveying | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 |  |  |

Natural Science - General (SG)
Term hours subtotal: 16

| Summer 4 62-62 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CON 296: Field Internship | 1 | C |  |
| Term hours subtotal: | 1 |  |  |
| Term 5 63-80 Credit Hours | Hours | Minimum Grade | Notes |
| CON 273: Electrical Construction Fundamentals and Project Management | 3 | C |  |
| CON 310: Testing of Materials for Construction | 4 |  |  |
| CON 345: Mechanical Systems | 4 |  |  |
| CON 383: Construction Estimating | 4 |  |  |
| CON 394: Advanced Heavy Equipment Operations OR <br> CON 394: Environmental Aspects of Heavy Construction OR <br> CON 486: Heavy Construction Estimating OR <br> CON 494: Heavy Construction Project Management OR <br> CON 494: Heavy Construction Earthworks | 3 |  |  |


| Term 6 $81-95$ Credit Hours | Hours | Minimum <br> Grade |  |
| :--- | :---: | :---: | :---: |
| CON 389: Construction Cost Accounting and Control (CS) | 3 |  |  |
| Complete 2 courses: <br> CON 394: Advanced Heavy Equipment Operations OR <br> CON 394: Environmental Aspects of Heavy Construction OR <br> CON 486: Heavy Construction Estimating OR <br> CON 494: Heavy Constuction Project Management OR <br> CON 494: Heavy Construction Earthworks |  |  |  |
| LES 305: Legal, Ethical, and Regulatory Issues in Business |  | 6 |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR <br> Upper Division Social and Behavioral Sciences (SB) |  | 3 |  |


| CON 484: Internship |  | 1 |  |
| :--- | :--- | :--- | :--- |
|  | Term hours subtotal: | 1 |  |
| Term 7 $7 \times 108$ Credit Hours |  | Hours | Minimum <br> Grade |

CON 450: Geotechnical Applications for Construction
CON 453: Construction Project Management I 3
CON 495: Construction Planning and Scheduling (CS) 3

CON 394: Advanced Heavy Equipment Operations OR
CON 394: Environmental Aspects of Heavy Construction OR
CON 486: Heavy Construction Estimating OR
CON 494: Heavy Construction Project Mana
3
Term hours subtotal: 12
$\left.\begin{array}{|l|cc|}\hline \text { Term 8 } & \text { 109-120 Credit Hours } & \text { Hours } \\ \hline \text { CON 424: Structural Design } & 3 \\ \hline \text { Grade }\end{array}\right]$

- Major GPA calculation includes all upper division CON and CIM courses.

| Total Hours: 120 | General University Requirements Legend | General Studies Awareness Requirements: |
| :--- | :--- | :--- |
| Upper Division Hours: 45 minimum | General Studies Core Requirements: | - Cultural Diversity in the U.S. (C) |
| Major GPA: 2.00 minimum | - Literacy and Critical Inquiry (L) | • Global Awareness (G) |
| Cumulative GPA: 2.00 minimum | - Mathematical Studies (MA) | - Historical Awareness (H) |
| Total hrs at ASU: 30 minimum | - Computer/Statistics/Quantitative Applications |  |
| Hrs Resident Credit for | (CS) | First-Year Composition |
| Academic Recognition: 56 minimum | - Humanities, Fine Arts and Design (HU) |  |
| Total Community College Hrs: 64 maximum | - Social and Behavioral Sciences (SB) |  |
|  | - Natural Science - Quantitative (SQ) |  |
|  | - Natural Science - General (SG) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Construction Management (Residential Construction), BS

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESCONRBS

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CON 100: Introduction to Construction | 2 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| 4 PHY 113: General Physics Laboratory (SQ) | 1 | C | - ASU 101 or College specific |
| 4 PHY 111: General Physics (SQ) | 3 | C | equivalent First Year Seminar |
| ASU 101-CON: The ASU Experience | 1 |  | required of all freshman student and should be taken the first |
| CON 101: Construction and Culture: a Built Environment (HU \& H \& G) | 3 | C | semester. |
| Minimum 2.00 GPA ASU Cumulative. |  |  | - If ENG 105 taken, a 3 hr applicable elective must also be taken prior to graduation. See Advisor. |
| Term hours subtotal: | 16 |  |  |


| Term 2 17-30 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. CON 243: Heavy Construction Equipment, Methods, and Materials | 3 | C |  |
| 4. CON 244: Working Drawing Analysis | 2 | C |  |
| 1 CON 252: Building Construction Methods, Materials, and Equipment | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| (1) Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 COM 225: Public Speaking (L) | 3 |  | IREMENT: |
| 1. CON 221: Applied Statics | 3 | C | Complete 13 critical courses by |
| 1. CON 251: Microcomputer Applications for Construction | 3 | C |  |
| 4 ECN 212: Microeconomic Principles (SB) | 3 |  |  |
| 1 STP 226: Elements of Statistics (CS) | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 46-61 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 1 CON 223: Strength of Materials | 3 | C |  |
| 1 CON 271: Construction Safety | 3 | C |  |
| CON 241: Surveying | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 |  |  |

Term hours subtotal: 16

| Summer 4 62-62 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CON 296: Field Internship | 1 | C |  |
| Term hours subtotal: | 1 |  |  |
| Term 5 63-80 Credit Hours | Hours | Minimum Grade | Notes |
| CON 273: Electrical Construction Fundamentals and Project Management | 3 | C |  |
| CON 310: Testing of Materials for Construction | 4 |  |  |
| CON 345: Mechanical Systems | 4 |  |  |
| CON 383: Construction Estimating | 4 |  |  |
| CON 377: Residential Construction Production Procedures OR CON 477: Residential Construction Business Practices OR REA 380: Real Estate Fundamentals OR Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 18 |  |  |
| Term 6 81-95 Credit Hours | Hours | Minimum Grade | Notes |
| CON 389: Construction Cost Accounting and Control (CS) | 3 |  |  |
| CON 377: Residential Construction Production Procedures OR CON 477: Residential Construction Business Practices OR REA 380: Real Estate Fundamentals OR Upper Division Elective | 3 |  |  |
| LES 305: Legal, Ethical, and Regulatory Issues in Business | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Summer 6 96-96 Credit Hours | Hours | Minimum Grade | Notes |
| CON 484: Internship | 1 |  |  |
| Term hours subtotal: | 1 |  |  |
| Term 7 97-108 Credit Hours | Hours | Minimum Grade | Notes |
| CON 450: Geotechnical Applications for Construction | 3 |  |  |
| CON 453: Construction Project Management I | 3 |  |  |
| CON 495: Construction Planning and Scheduling (CS) | 3 |  |  |
| CON 377: Residential Construction Production Procedures OR CON 477: Residential Construction Business Practices OR REA 380: Real Estate Fundamentals OR Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 12 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| CON 424: Structural Design | 3 |  |  |
| CON 455: Construction Project Management II | 3 |  |  |
| CON 496: Construction Contract Administration (L) | 3 |  |  |
| CON 377: Residential Construction Production Procedures OR CON 477: Residential Construction Business Practices OR REA 380: Real Estate Fundamentals OR Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 12 |  |  |

- Major GPA calculation includes all upper division CON and CIM courses.

| Total Hours: 120 | General University Requirements Legend | General Studies Awareness Requirements: |
| :--- | :--- | :--- |
| Upper Division Hours: 45 minimum | General Studies Core Requirements: | - Cultural Diversity in the U.S. (C) |
| Major GPA: 2.00 minimum | - Literacy and Critical Inquiry (L) | - Global Awareness (G) |
| Cumulative GPA: 2.00 minimum | - Mathematical Studies (MA) | - Historical Awareness (H) |
| Total hrs at ASU: 30 minimum | - Computer/Statistics/Quantitative Applications |  |
| Hrs Resident Credit for | (CS) | First-Year Composition |
| Academic Recognition: 56 minimum | - Humanities, Fine Arts and Design (HU) |  |
| Total Community College Hrs: 64 maximum | - Social and Behavioral Sciences (SB) |  |
|  | - Natural Science - Quantitative (SQ) |  |
|  | - Natural Science - General (SG) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Construction Management (Specialty Construction), BS

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESCONSBS

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. CON 100: Introduction to Construction | 2 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course. <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman student and should be taken the first semester. <br> - If ENG 105 taken, a 3 hr applicable elective must also be taken prior to graduation. See Advisor. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| 1 PHY 111: General Physics (SQ) | 3 | C |  |
| 1 PHY 113: General Physics Laboratory (SQ) | 1 | C |  |
| ASU 101-CON: The ASU Experience | 1 |  |  |
| CON 101: Construction and Culture: a Built Environment (HU \& H \& G) | 3 | C |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-30 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| 1 CON 243: Heavy Construction Equipment, Methods, and Materials | 3 | C |  |
| 4 CON 244: Working Drawing Analysis | 2 | C |  |
| 4 CON 252: Building Construction Methods, Materials, and Equipment | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 4 CON 221: Applied Statics | 3 | C | - CRITICAL REQUIREMENT: Complete 13 critical courses by end of term 3. |
| 1. CON 251: Microcomputer Applications for Construction | 3 | C |  |
| 4 COM 225: Public Speaking (L) | 3 |  |  |
| 4 ECN 212: Microeconomic Principles (SB) | 3 |  |  |
| 1 STP 226: Elements of Statistics (CS) | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 46-61 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| 1 CON 223: Strength of Materials | 3 | C |  |
| 4 CON 271: Construction Safety | 3 | C |  |
| CON 241: Surveying | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 |  |  |

Term hours subtotal: 16

| Summer 4 62-62 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CON 296: Field Internship | 1 | C |  |
| Term hours subtotal: | 1 |  |  |
| Term 5 63-80 Credit Hours | Hours | Minimum Grade | Notes |
| CON 273: Electrical Construction Fundamentals and Project Management | 3 | C |  |
| CON 310: Testing of Materials for Construction | 4 |  |  |
| CON 345: Mechanical Systems | 4 |  |  |
| CON 383: Construction Estimating | 4 |  |  |
| CON 468: Mechanical and Electrical Estimating OR <br> CON 471: Mechanical and Electrical Project Management OR <br> CON 494: Cleanroom Construction OR <br> Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 18 |  |  |
| Term 6 81-95 Credit Hours | Hours | Minimum Grade | Notes |
| CON 389: Construction Cost Accounting and Control (CS) | 3 |  |  |
| CON 468: Mechanical and Electrical Estimating OR <br> CON 471: Mechanical and Electrical Project Management OR <br> CON 494: Cleanroom Construction OR <br> Upper Division Elective | 3 |  |  |
| LES 305: Legal, Ethical, and Regulatory Issues in Business | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Summer 6-96-96 Credit Hours | Hours | Minimum Grade | Notes |
| CON 484: Internship | 1 |  |  |
| Term hours subtotal: | 1 |  |  |
| Term 7 97-108 Credit Hours | Hours | Minimum Grade | Notes |
| CON 450: Geotechnical Applications for Construction | 3 |  |  |
| CON 453: Construction Project Management I | 3 |  |  |
| CON 495: Construction Planning and Scheduling (CS) | 3 |  |  |
| CON 468: Mechanical and Electrical Estimating OR <br> CON 471: Mechanical and Electrical Project Management OR <br> CON 494: Cleanroom Construction OR <br> Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 12 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| CON 424: Structural Design | 3 |  |  |
| CON 455: Construction Project Management II | 3 |  |  |
| CON 496: Construction Contract Administration (L) | 3 |  |  |
| CON 468: Mechanical and Electrical Estimating OR <br> CON 471: Mechanical and Electrical Project Management OR <br> CON 494: Cleanroom Construction OR <br> Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 12 |  |  |

- Major GPA calculation includes all upper division CON and CIM courses.

| Total Hours: 120 | General University Requirements Legend | General Studies Awareness Requirements: |
| :--- | :--- | :--- |
| Upper Division Hours: 45 minimum | General Studies Core Requirements: | - Cultural Diversity in the U.S. (C) |
| Major GPA: 2.00 minimum | - Literacy and Critical Inquiry (L) | - Global Awareness (G) |
| Cumulative GPA: 2.00 minimum | - Mathematical Studies (MA) | - Historical Awareness (H) |
| Total hrs at ASU: 30 minimum | - Computer/Statistics/Quantitative Applications |  |
| Hrs Resident Credit for | (CS) | First-Year Composition |
| Academic Recognition: 56 minimum | - Humanities, Fine Arts and Design (HU) |  |
| Total Community College Hrs: 64 maximum | - Social and Behavioral Sciences (SB) |  |
|  | - Natural Science - Quantitative (SQ) |  |
|  | - Natural Science - General (SG) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Electrical Engineering, BSE

Ira A. Fulton Schools of Engineering Campus:Tempe
ESEEEBSE


| Term 2 17-32 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| 4 PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| 1 PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| EEE 120: Digital Design Fundamentals | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| (1) Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 33-46 Credit Hours Critical course signified by ! | Hours | Minimum Grade | Notes |


| 1. EEE 202: Circuits I | 4 |  | - CRITICAL REQUIREMENT: <br> Complete 10 critical courses by end of term 3 . |
| :---: | :---: | :---: | :---: |
| 4 MAT 267: Calculus for Engineers III (MA) | 3 | C |  |
| MAT 274: Elementary Differential Equations (MA) OR MAT 275: Modern Differential Equations (MA) | 3 | C |  |
| 4 PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 | C |  |
| 4 PHY 132: University Physics Laboratory II (SQ) | 1 | C |  |
| Complete First-Year Composition requirement. |  |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 47-61 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum <br> Grade | Notes |



| EEE 455: Communication Systems |
| :---: |
| EEE 459: Communication Networks |
| EEE 480: Feedback Systems |
| EEE 481: Computer-Controlled Systems |
| EEE 425: Digital Systems and Circuits |
| EEE 433: Analog Integrated Circuits |
| EEE 443: Antennas for Wireless Communications |
| EEE 445: Microwaves |
| EEE 448: Fiber Optics |
| EEE 434: Quantum Mechanics for Engineers |
| EEE 435: Fundamentals of CMOS and MEMS |
| EEE 436: Fundamentals of Solid-State Devices |
| EEE 437: Optoelectronics |
| EEE 439: Semiconductor Facilities and Cleanroom Practices |
| EEE 460: Nuclear Power Engineering |
| EEE 463: Electrical Power Plants |
| EEE 470: Electric Power Devices |
| EEE 471: Power System Analysis |
| EEE 472: Power Electronics and Power Management |
| EEE 473: Electrical Machinery |
| CSE 420: Computer Architecture I |

## Notes:

- Major GPA calculation includes FSE 100, CSE, EEE, Area Pathway, and Technical Elective courses.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map

## Electrical Engineering (Electric Power and Energy Systems),BSE

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESEEEPBSE

| Term 1 0-16 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| FSE 100: Introduction to Engineering |  | 2 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course. <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman student and should be taken the first semester. <br> - CHM 113 is a prerequisite for CHM 116 and does not apply towards degree credit. <br> - If ENG 105 taken, a 3 hr applicable elective must also be taken prior to graduation. See Advisor. |
| 4 MAT 265: Calculus for Engineers I (MA) |  | 3 | C |  |
| ASU 101-EEE: The ASU Experience |  | 1 |  |  |
| CHM 114: General Chemistry for Engineers (SQ) OR CHM 116: General Chemistry II (SQ) |  | 4 |  |  |
| CSE 100: Principles of Programming with C++ (CS) |  | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |


| Term 2 17-32 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| 4 PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| 1. PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| EEE 120: Digital Design Fundamentals | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3-46 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 EEE 202: Circuits I | 4 |  | - CRITICAL REQUIREMENT: Complete 10 critical courses by end of term 3. |
| 4 MAT 267: Calculus for Engineers III (MA) | 3 | C |  |
| MAT 274: Elementary Differential Equations (MA) OR MAT 275: Modern Differential Equations (MA) | 3 | C |  |
| 1 PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 | C |  |
| 4 PHY 132: University Physics Laboratory II (SQ) | 1 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 47-61 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |


| EEE 241: Fundamentals of Electromagnetics | 3 |  |  |
| :---: | :---: | :---: | :---: |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| MAT 342: Linear Algebra OR MAT 343: Applied Linear Algebra | 3 | C |  |
| PHY 241: University Physics III | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 62-75 Credit Hours | Hours | Minimum Grade | Notes |
| EEE 230: Computer Organization and Assembly Language Programming | 3 |  |  |
| EEE 334: Circuits II | 4 |  |  |
| EEE 350: Random Signal Analysis | 3 |  |  |
| EEE 360: Energy Systems and Power Electronics | 4 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 6 76-90 Credit Hours | Hours | Minimum Grade | Notes |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) OR ECN 201: Economic Issues and Analysis (SB) | 3 |  | - Area Pathway courses are prerequisites for Technical |
| Complete 3 courses: <br> Upper Division Area Pathway Course | 12 |  | Electives. See Advisor for guidance in selection. |
| Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |
| BIO OR CHM OR PHY OR MAT Upper Division Elective AND Upper Division Technical Elective | 3 |  |  |
| EEE 488: Senior Design Laboratory I (L) | 3 |  |  |
| Complete 2 courses: <br> EEE 460: Nuclear Power Engineering OR <br> EEE 463: Electrical Power Plants OR <br> EEE 470: Electric Power Devices OR <br> EEE 471: Power System Analysis OR <br> EEE 473: Electrical Machinery OR <br> EEE 498: Power Electronics OR <br> EEE 498: Solar Energy | 6 |  |  |
| GCU 364: Energy in the Global Arena (SB \& G) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| EEE 489: Senior Design Laboratory II (L) | 3 |  |  |
| Complete 2 courses: <br> Upper Division Technical Elective | 6 |  |  |
| EEE 460: Nuclear Power Engineering OR <br> EEE 463: Electrical Power Plants OR <br> EEE 470: Electric Power Devices OR <br> EEE 471: Power System Analysis OR <br> EEE 473: Electrical Machinery OR <br> EEE 498: Power Electronics OR <br> EEE 498: Solar Energy | 3 |  |  |
| Humanities, Fine Arts and Design (HU) OR Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |


| Technical Electives | Area Pathway Course |
| :---: | :---: |
| EEE 460: Nuclear Power Engineering | EEE 304: Signals and Systems II |
| EEE 463: Electrical Power Plants | EEE 333: Hardware Design Languages and Programmable Logic |
| EEE 470: Electric Power Devices |  |
| EEE 471: Power System Analysis | EEE 335: Analog and Digital Circuits |
|  | EEE 341: Engineering Electromagnetics |
| EEE 472: Power Electronics and Power Management | EEE 352: Properties of Electronic Materials |

EEE 473: Electrical Machinery

| EEE 498: Power Electronics, Power Electronics Lab, Solar Energy |  |
| :---: | :---: |
|  | EEE 404: Real-Time DSP Systems |
|  | EEE 407: Digital Signal Processing |
|  | EEE 455: Communication Systems |
|  | EEE 459: Communication Networks |
|  | EEE 480: Feedback Systems |
|  | EEE 481: Computer-Controlled Systems |
|  | EEE 425: Digital Systems and Circuits |
|  | EEE 433: Analog Integrated Circuits |
|  | EEE 443: Antennas for Wireless Communications |
|  | EEE 445: Microwaves |
|  | EEE 448: Fiber Optics |
|  | EEE 434: Quantum Mechanics for Engineers |
|  | EEE 435: Fundamentals of CMOS and MEMS |
|  | EEE 436: Fundamentals of Solid-State Devices |
|  | EEE 437: Optoelectronics |
|  | EEE 439: Semiconductor Facilities and Cleanroom Practices |
|  | EEE 460: Nuclear Power Engineering |
|  | EEE 463: Electrical Power Plants |
|  | EEE 470: Electric Power Devices |
|  | EEE 471: Power System Analysis |
|  | EEE 472: Power Electronics and Power Management |
|  | EEE 473: Electrical Machinery |
|  | CSE 420: Computer Architecture I |

EEE 404: Real-Time DSP Systems
EEE 407: Digital Signal Processing
EEE 455: Communication Systems
EEE 459: Communication Networks
EEE 480: Feedback Systems
EEE 481: Computer-Controlled Systems
EEE 425: Digital Systems and Circuits
EEE 433: Analog Integrated Circuits
EEE 443: Antennas for Wireless
Communications
EEE 445: Microwaves
EEE 448: Fiber Optics
EEE 434: Quantum Mechanics for Engineers
EEE 435: Fundamentals of CMOS and MEMS

EEE 436: Fundamentals of Solid-State Devices

EEE 437: Optoelectronics
EEE 439: Semiconductor Facilities and
anroom Practices
EEE 460: Nuclear Power Engineering
EEE 463: Electrical Power Plants
EEE 470: Electric Power Devices

EEE 471: Power System Analysis
EEE 472: Power Electronics and Power

EEE 473: Electrical Machinery
CSE 420: Computer Architecture I

## Notes:

- Major GPA calculation includes FSE 100, CSE, EEE, Area Pathway, and Technical Elective courses.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map

## Engineering Management, BSE

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESEMGBSE

| Term 1 0-15 Credit Hours Critical course signified by ${ }^{\text {P }}$ |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 1 MAT 265: Calculus for Engineers I (MA) |  | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101-IEE should be taken first semester. <br> - If ENG 105 is taken, a 3 credit hour applicable elective must also be taken prior to graduation. See advisor. |
| ASU 101-IEE: The ASU Experience |  | 1 |  |  |
| FSE 100: Introduction to Engineering |  | 2 | C |  |
| ENG 101: First-Year Composition OR <br> ENG 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107: English for Foreign Students OR <br> ENG 108: English for Foreign Students |  | 3 | C |  |
| PGS 101: Introduction to Psychology (SB) |  | 3 |  |  |
| Basic Science Elective |  | 3 |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 2 16-31 Credit Hours Critical course signified by ${ }^{(1)}$ |  | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| 1. CSE 110: Principles of Programming with Java (CS) |  | 3 | C |  |
| 4 MAT 266: Calculus for Engineers II (MA) |  | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) |  | 3 |  |  |
| ENG 101: First-Year Composition OR <br> ENG 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107: English for Foreign Students OR <br> ENG 108: English for Foreign Students |  | 3 | C |  |
| PHY 121: University Physics I: Mechanics (SQ) |  | 3 | C |  |
| PHY 122: University Physics Laboratory I (SQ) |  | 1 | C |  |
| 4 Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by ${ }^{\text {P }}$ |  | Hours | Minimum Grade | Notes |
| 4 ACC 231: Uses of Accounting Information I |  | 3 | C | - CRITICAL REQUIREMENT: Complete 4 critical courses by end of term 3. <br> - CHM 113 is a prerequisite to CHM 116. <br> - The sustainability electives should be chosen from advisor approved SOS courses and the global engineering electives should be chosen from advisor approved special topics. The entrepreneurship electives include FSE 301 Entrepreneurship for Engineers and other advisor approved topics. |
| CHM 114: General Chemistry for Engineers (SQ) OR CHM 116: General Chemistry II (SQ) |  | 4 |  |  |
| CSE 205: Object-Oriented Programming and Data Structures (CS) |  | 3 | C |  |
| MAT 267: Calculus for Engineers III (MA) |  | 3 | C |  |
| Global Engineering or Sustainability or Entreprenuership Elective |  | 3 |  |  |
| 4 Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
| Complete First-Year Composition requirement. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |


| Term 4 | $48-62$ Credit Hours Critical course signified by | Hours | Minimum <br> Grade |
| :--- | :---: | :---: | :---: |
| ACC 241: Uses of Accounting Information II | 3 | C |  |
| MAT 242: Elementary Linear Algebra | 2 | C |  |


| COM 263: Elements of Intercultural Communication (SB \& C \& G) | 3 |  |  |
| :---: | :---: | :---: | :---: |
| IEE 380: Probability and Statistics for Engineering Problem Solving (CS) | 3 |  |  |
| IEE 382: Probability and Statistics Lab | 1 |  |  |
| Math or Science Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 63-78 Credit Hours | Hours | Minimum Grade | Notes |
| IEE 431: Engineering Administration | 3 |  |  |
| IEE 475: Simulating Stochastic Systems (CS) | 4 |  |  |
| IEE 381: Six Sigma Methodology OR IEE 305: Information Systems Engineering (CS) | 3 |  |  |
| Industry Focus Area Elective | 3 |  |  |
| Upper Division Math or Science Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 79-93 Credit Hours | Hours | Minimum Grade | Notes |
| IEE 300: Economic Analysis for Engineers OR FIN 300: Fundamentals of Finance | 3 |  |  |
| IEE 458: Project Management | 3 |  |  |
| IEE 369: Work Analysis and Design (L) OR IEE 461: Production Control | 3 |  |  |
| Complete 2 courses: <br> Industry Focus Area Elective | 6 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours | Hours | Minimum Grade | Notes |
| FSE 494: Multidisciplinary Capstone I AND Literacy and Critical Inquiry (L) | 3 |  |  |
| IEE 456: Intro to Systems Engineering | 3 |  |  |
| MGT 300: Organization and Management Leadership | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Upper Division Industry Focus Area Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| FSE 494: Multidisciplinary Capstone II AND Literacy and Critical Inquiry (L) | 3 |  |  |
| IEE 454: Risk Management | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Upper Division Industry Focus Area Elective | 3 |  |  |
| Term hours subtotal: | 12 |  |  |



- Major GPA calculation includes: ACC 231, ACC 241, CSE 205, ECN 211, FIN 300, FSE 100, FSE 494 Capstone I, FSE 494 Capstone II, MGT 300, and all IEE courses.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map

## Engineering Special Studies (Premedical Engineering), BSE

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESESPPBSE

| Term 1 0-17 Credit Hours Critical course signified by | Hours | Minimum Grade |
| :---: | :---: | :---: |
| BIO 181: General Biology I (SQ) OR CHM 114: General Chemistry for Engineers (SQ) | 4 | C |
| BME 194: Introduction to Biomedical Engineering I OR Elective | 1 | C |
| BME 194: Introduction to Biomedical Engineering II OR Elective | 1 | C |
| BME 194: Introduction to Biomedical Engineering III OR Elective | 1 | C |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |
| 4 ) MAT 265: Calculus for Engineers I (MA) | 3 | C |
| ASU 101-BME: Course not found | 1 |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |
| Term hours sub | 17 |  |

- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics course
- ASU 101-BME and Intro to Biomedical Engineering I, II, III are required for freshmen and sophomores and should be completed first semester. Non-freshmen and sophomores should complete applicable elective. See Advisor.
- If ENG 105 is taken, a 3 hr applicable elective must also be taken prior to graduation. See Advisor.

| Term 2 18-33 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum <br> Grade | Notes |
| :---: | :---: | :---: | :---: |
| BIO 181: General Biology I (SQ) OR CHM 114: General Chemistry for Engineers (SQ) | 4 | C | - Computation in Biomedical Engineering, MATLAB/Mathcad in BME, and Computational Biostatistics must all be completed to receive (CS) credit. |
| 4 BME 194: Applicatons of Math \& Science to BME I | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| 1 PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| 4 PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| BME 194: Computation in Biomedical Engineering AND Computer/Statistics/Quantitative Applications (CS) | 1 | C |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 34-50 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 4 MAT 267: Calculus for Engineers III (MA) | 3 | C | - CRITICAL REQUIREMENT: Complete 15 critical courses each with a minimum grade of "C" (14 courses if ENG 105 taken) |
| 4 PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 | C |  |
| 4 PHY 132: University Physics Laboratory II (SQ) | 1 | C |  |
| BME 294: Cell Tissue Physiology | 1 | C |  |
| BME 294: Anatomy \& Physiology: Systems | 1 | C |  |
| BME 294: Anatomy \& Physiology: Tissues | 1 | C |  |
| CHM 233: General Organic Chemistry I AND CHM 237: General Organic Chemistry Laboratory I | 4 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) OR ECN 201: Economic Issues and Analysis (SB) | 3 |  |  |

Minimum 2.00 GPA ASU Cumulative.

| Term 4 51-65 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 BME 294: Applications of Math \& Science to BME II | 1 | C | - Computation in Biomedical Engineering, MATLAB/Mathcad in BME, and Computational Biostatistics must all be completed to receive (CS) credit. |
| 1 MAT 275: Modern Differential Equations (MA) | 3 | C |  |
| BME 294: Conservation Principles | 1 | C |  |
| BME 294: BME Professional Development I | 1 | C |  |
| BME 294: MATLAB/Mathcfad in BME AND Computer/Statistics/Quantitative Applications (CS) | 1 | C |  |
| EEE 202: Circuits I | 4 | C |  |
| MAE 212: Engineering Mechanics | 4 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 66-81 Credit Hours | Hours | Minimum Grade | Notes |
| BME 394: Numerical Analysis | 1 | C | - Computation in Biomedical Engineering, MATLAB/Mathcad in BME, and Computational Biostatistics must all be completed to receive (CS) credit. |
| BME 394: Biomaterial/ Physicochemical Properties | 1 | C |  |
| BME 394: Biomaterial Implants \& Devices | 1 | C |  |
| BME 394: Basic Concepts for Biological Signals and Systems | 1 | C |  |
| BME 394: Transforms for BME Applications | 1 | C |  |
| BME 394: Microcomputing \& Embedded Systems for BME | 1 | C |  |
| BME 394: Statistics for Biomedical Engineers | 1 | C |  |
| BME 394: Computational Biostatistics AND <br> Upper Division Computer/Statistics/Quantitative Applications (CS) | 1 | C |  |
| BME 394: Probability for Biomedical Engineers | 1 | C |  |
| BME 394: Circuits for BME Instrumentation | 1 | C |  |
| MAT 343: Applied Linear Algebra | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 82-94 Credit Hours | Hours | Minimum Grade | Notes |
| CHM 234: General Organic Chemistry II AND <br> CHM 238: General Organic Chemistry Laboratory II | 4 |  |  |
| BME 394: Engineering Design Methods | 1 | C |  |
| BME 394: 3D Spatial \& Graphic Design/ Modeling | 1 | C |  |
| BME 394: BME Professional Development II | 1 | C |  |
| BME 394: Mass Transport | 1 | C |  |
| BME 394: Momentum Transport | 1 | C |  |
| BME 394: Heat/ Energy Transport | 1 | C |  |
| BME 394: Filters \& Stochastic Process | 1 | C |  |
| BME 394: Design of Experiemtns \& Clinical Trials | 1 | C |  |
| BME 394: Applications of Math \& Science to BME III | 1 | C |  |
| Term hours subtotal: | 13 |  |  |
| Term 7 95-106 Credit Hours | Hours | Minimum Grade | Notes |


| BME 494: Capstone I AND <br> Upper Division Literacy and Critical Inquiry (L) | 1 |  |
| :--- | :---: | :---: |
| BME 494: Capstone II AND |  | C |
| Upper Division Literacy and Critical Inquiry (L) | 1 | C |
| BME 494: Captsone III AND | 1 | Crital Inquiry (L) |
| Upper Division Literacy and Critil |  |  |
| BME 494: Instrumentation I | 1 | C |
| BME 494: Instrumentation II | 1 | C |
| BME 494: Instrumentation III | 1 | C |
| Upper Division Professional Elective | 3 |  |

- 6 hrs of Professional Electives required. 5 hrs of Genera Electives required. See Advisor for approved courses
- BME Capstone I, II, and III mus all be completed to receive ( L ) credit.

| Term 8 107-120 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| BME 494: Capstone IV AND <br> Upper Division Literacy and Critical Inquiry (L) | 1 | C | - 6 hrs of Professional Electives required. 5 hrs of General Electives required. See Advisor for approved courses. <br> BME Capstone IV, V, and VI must all be completed to receive (L) credit. |
| BME 494: Capstone V AND <br> Upper Division Literacy and Critical Inquiry (L) | 1 | C |  |
| BME 494: Capstone VI AND Literacy and Critical Inquiry (L) | 1 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Upper Division Professional Elective | 3 |  |  |
| Complete 2 courses: <br> Upper Division General Elective | 5 |  |  |
| Term hours subtotal: | 14 |  |  |

## Notes:

- Major GPA calculation includes all BME courses.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.25 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year

## 2011-2012 Major Map Industrial Engineering, BSE

Ira A. Fulton Schools of Engineering Campus:Tempe
ESIEEBSE

| Term 1-15 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course. <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman student and should be taken the first semester. <br> - If ENG 105 is taken, a 3 hour applicable elective must also be taken prior to graduation. See Advisor. |
| FSE 100: Introduction to Engineering OR CSE 110: Principles of Programming with Java (CS) | 2-3 | C |  |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101-IEE: The ASU Experience | 1 |  |  |
| Basic Science Elective | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15-16 |  |  |


| Term 2 16-28 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| FSE 100: Introduction to Engineering OR CSE 110: Principles of Programming with Java (CS) | 3-2 | C |  |
| 4 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| 4 PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| 4 PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13-12 |  |  |
| Term 3 29-44 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 4 ECN 211: Macroeconomic Principles (SB) | 3 |  | - CRITICAL REQUIREMENT: Complete 9 critical courses by end of term 3. ENG 102 \& 108 are not part of the this course count. |
| CSE 205: Object-Oriented Programming and Data Structures (CS) | 3 |  |  |
| IEE 210: Introduction to Industrial Engineering | 3 | C |  |
| MAT 267: Calculus for Engineers III (MA) | 3 |  |  |
| PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 |  |  |
| PHY 132: University Physics Laboratory II (SQ) | 1 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 45-59 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 4 IEE 220: Business/Industrial Engr | 3 | C | - CHM 113 is a prerequisite for CHM 116 and does not apply towards degree credit. |
| CHM 114: General Chemistry for Engineers (SQ) OR CHM 116: General Chemistry II (SQ) | 4 |  |  |



Total Hours: 120
Upper Division Hours: 45 minimum

General University Requirements Legend
General Studies Core Requirements:

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)

| Major GPA: 2.00 minimum | - Literacy and Critical Inquiry (L) | - Global Awareness (G) |
| :--- | :--- | :--- |
| Cumulative GPA: 2.00 minimum | - Mathematical Studies (MA) | • Historical Awareness (H) |
| Total hrs at ASU: 30 minimum | - Computer/Statistics/Quantitative Applications |  |
| Hrs Resident Credit for | (CS) |  |
| Academic Recognition: 56 minimum | First-Year Composition |  |
| Total Community College Hrs: 64 maximum | - Social and Behavioral Sciences (SB) |  |
|  | - Natural Science - Quantitative (SQ) |  |
|  | - Natural Science - General (SG) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Informatics, BS

Ira A. Fulton Schools of Engineering Campus:Tempe
ESCPIBS

| Term 1 0-16 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CPI 101: Introduction to Informatics (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar (ASU 101-CPI or ASU 101-CSE) required of all freshman student and should be taken the first semester. <br> - If ENG 105 is taken, a 3 credit hour applicable elective must also be taken prior to graduation. See advisor. |
| 4 CSE 110: Principles of Programming with Java (CS) | 3 | C |  |
| MAT 210: Brief Calculus (MA) OR MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101-CSE: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 2 17-30 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 CSE 205: Object-Oriented Programming and Data Structures (CS) | 3 | C |  |
| 4 MAT 242: Elementary Linear Algebra | 2 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR <br> Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR <br> Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 31-46 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 MAT 243: Discrete Mathematical Structures | 3 | C | - CRITICAL REQUIREMENT: Complete 6 critical courses by end of term three. |
| IEE 305: Information Systems Engineering (CS) | 3 | C |  |
| Lower Division Informatics Elective or Focus Area Required Course | 3 | C |  |
| Natural Science - General (SG) | 4 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |

Term hours subtotal: 16

| Term 4 47-62 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 CPI 200: Mathematical Foundations of Informatics (MA) | 3 | C | - See Advisor or http://engineering.asu.edu/undergraduate/informatics for list of Informatics Electives or Focus Area Required Course. |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. <br> (C) OR <br> Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |

Complete 2 courses:
Lower Division Informatics Elective or Focus Area Required Course
6
C

Natural Science - Quantitative (SQ)

| Term 5 63-77 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CPI 310: Information and Data Management | 3 | C | - See Advisor or http://engineering.asu.edu/undergraduate/informatics for list of Informatics Electives or Focus Area Required Course. |
| CPI 360: Decision Making and Problem Solving | 3 | C |  |
| Complete 2 courses: <br> Lower Division Informatics Elective or Focus Area Required Course | 6 | C |  |
| STP 420: Introductory Applied Statistics (CS) OR <br> STP 231: Statistics for Life Science (CS) OR <br> GCU 495: Quantitative Methods in Geography (CS) OR IEE 380: Probability and Statistics for Engineering Problem Solving (CS) | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 78-92 Credit Hours | Hours | Minimum Grade | Notes |
| CPI 350: Evaluation of Informatics Systems | 3 | C | - See Advisor or $\mathrm{http}: / /$ engineering.asu.edu/undergraduate/informatics for list of Informatics Electives or Focus Area Required Course. |
| CSE 463: Introduction to Human Computer Interaction | 3 | C |  |
| Complete 2 courses: <br> Lower Division Informatics Elective or Focus Area Required Course | 6 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) AND Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 93-107 Credit Hours | Hours | Minimum Grade | Notes |
| CPI 485: Informatics Capstone I AND Upper Division Literacy and Critical Inquiry (L) | 3 | C | - See Advisor or http://engineering.asu.edu/undergraduate/informatic: for list of Informatics Electives or Focus Area Required Course. |
| Complete 4 courses: <br> Upper Division Informatics Elective or Focus Area Required Course | 12 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 108-120 Credit Hours | Hours | Minimum Grade | Notes |
| CPI 486: Informatics Capstone II AND Upper Division Literacy and Critical Inquiry (L) | 4 | C | - See Advisor or http://engineering.asu.edu/undergraduate/informatics for list of Informatics Electives or Focus Area Required Course. |
| Complete 3 courses: <br> Upper Division Informatics Elective or Focus Area Required Course | 9 | C |  |
| Term hours subtotal: | 13 |  |  |

## Notes:

- 2.5 GPA required in Informatics Electives and Focus Area Required Courses.
- 2.5 GPA required in core courses: CPI 101, 200, 310, 350, 360485,486 ; CSE 110, 205463 ; MAT 210 or MAT 265, MAT 242, 243; and STP 420 or STP 231 or GCU 495 or IEE 380; IEE 305.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Materials Science \& Engineering, BSE

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESMSEBSE

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHM 114: General Chemistry for Engineers (SQ) OR CHM 113: General Chemistry I (SQ) AND CHM 116: General Chemistry II (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses. <br> - ASU Math Placement Exam score determines placement in |
| 1. MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| 4 MSE 100: Introduction of Materials Engineering | 2 |  |  |
| ASU 101-MSE: The ASU Experience | 1 |  | Mathematics course. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - ASU 101-MSE and MSE 100 should be completed first semester. |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  | - CHM 113 is a prerequisite to CHM 116 and can be apply as a Math Science Elective. |
| 4 Minimum 2.00 GPA ASU Cumulative. |  |  | - If student takes ENG 105 a 3 hr applicable elective must also be |
| Term hours subtotal: | 16 |  | taken prior to graduation. See Advisor. |


| Term 2 17-32 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4. MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| 1 MSE 250: Structure and Properties of Materials | 3 | C |  |
| 1 PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| 1. PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| - Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by | Hours | Minimum <br> Grade | Notes |
| 1 Mat 267: Calculus for Engineers III (MA) | 3 | C | - CRITICAL REQUIREMENT: Complete 10 critical courses by end of term 3 . |
| 1 PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 | C |  |
| 4 PHY 132: University Physics Laboratory II (SQ) | 1 | C |  |
| BME 111: Engineering Perspectives on Biological Systems OR BIO 181: General Biology I (SQ) OR <br> BIO 182: General Biology II (SG) | 3-4 |  |  |
| MSE 215: Materials Synthesis | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| - Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Minimum |  |  |  |


| Term 4 49-63 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MSE 211: Introduction to Mechanics of Materials | 3 |  |  |
| MAT 275: Modern Differential Equations (MA) | 3 |  |  |
| MAT 343: Applied Linear Algebra | 3 |  |  |
| IEE 380: Probability and Statistics for Engineering Problem Solving (CS) | 3 |  |  |
| PHY 241: University Physics III | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 64-79 Credit Hours | Hours | Minimum Grade | Notes |
| Math or Science Elective | 3-4 |  |  |
| MSE 315: Mathematical and Computer Methods in Materials (CS) | 3 |  |  |
| MSE 330: Thermodynamics of Materials | 3 |  |  |
| MSE 355: Materials Structure and Microstructure | 3 |  |  |
| MSE 356: Materials Structure and Microstructure Lab | 1 |  |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 6 80-93 Credit Hours | Hours | Minimum Grade | Notes |
| MSE 335: Materials Kinetics and Processing | 3 |  |  |
| MSE 420: Physical Metallurgy | 3 |  |  |
| MSE 421: Physical Metallurgy Laboratory | 1 |  |  |
| MSE 450: Introduction to Materials Characterization | 3 |  |  |
| MSE 451: Introduction to Materials Characterization Lab | 1 |  |  |
| MSE 458: Introduction to Electronic, Magnetic, and Optical Properties | 3 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 7 94-108 Credit Hours | Hours | Minimum Grade | Notes |
| MSE 440: Mechanical Properties of Solids | 3 |  |  |
| MSE 470: Polymers and Composites | 3 |  |  |
| MSE 471: Introduction to Ceramics | 3 |  |  |
| MSE 482: Materials Engineering Design (L) | 3 |  |  |
| Advanced Science Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| MSE 490: Capstone Design Project (L) | 3 |  |  |
| Complete 2 courses: <br> Technical Elective | 6 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 12 |  |  |

Advanced Science Elective
The Advanced Science Elective includes most
200-level and above math/science (BIO,
CHM, MAT, PHY) courses. See Advisor for
approved advanced science electives.
Math or Science Elective
CHM 113: General Chemistry I (SQ)

| GLG 101: Introduction to Geology I |
| :--- |
| (Physical) |
| BQ \& G) |
| BIO 2** Elective |

Technical Electives
BME 318: Biomaterials
BME 412: Biomedical Engineering II
BME 416: Biomechanics
CHE 458: Semiconductor Material Processing
CHM 333: Organic Chemistry for Majors I
CHM 334: Organic Chemistry for Majors II

## CHM 471: Solid-State Chemistry

EEE 435: Fundamentals of CMOS and MEMS

EEE 436: Fundamentals of Solid-State Devices

IEE 300: Economic Analysis for Engineers
IEE 369: Work Analysis and Design (L)
IEE 431: Engineering Administration
IEE 437: Human Factors Engineering
IEE 463: Computer-Aided Manufacturing and Control (CS)

MAE 322: Structural Mechanics
MAE 342: Principles of Mechanical Design
MAE 351: Manufacturing Processes
MAE 442: Mechanical Systems Design
The technical electives include most 300-level and above engineering, math, and science courses. See Advisor for approved list.

With Advisor approval MSE 441, 475, 476 and select MSE 494's can apply as Technical Electives but cannot also be used toward a minor.

## Notes:

- Major GPA calculation includes PHY 241, Advanced Science Elective, Technical Electives, and all MSE courses.

| Total Hours: 120 | General University Requirements Legend | General Studies Awareness Requirements: |
| :--- | :--- | :--- |
| Upper Division Hours: 45 minimum | General Studies Core Requirements: | • Cultural Diversity in the U.S. (C) |
| Major GPA: 2.00 minimum | - Literacy and Critical Inquiry (L) | • Global Awareness (G) |
| Cumulative GPA: 2.00 minimum | - Mathematical Studies (MA) | • Historical Awareness (H) |
| Total hrs at ASU: 30 minimum | - Computer/Statistics/Quantitative Applications |  |
| Hrs Resident Credit for | (CS) | First-Year Composition |
| Academic Recognition: 56 minimum | - Humanities, Fine Arts and Design (HU) |  |
| Total Community College Hrs: 64 maximum | - Social and Behavioral Sciences (SB) |  |
|  | - Natural Science - Quantitative (SQ) |  |
|  | - Natural Science - General (SG) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Mechanical Engineering, BSE

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESMAEMBSE

| Term 1 0-16 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHM 114: General Chemistry for Engineers (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses. <br> - ASU Math Placement Exam score determines placement in Mathematics course. <br> - ASU 101-MAE and FSE 100 required for freshmen and should be completed first semester. Non-freshmen see Advisor for petitioning replacement electives. <br> - CHM 113 is a prerequisite for CHM 116 and does not apply towards degree credit. <br> - If ENG 105 taken, a 3 hr applicable elective must also be taken prior to graduation. See Advisor. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101-MAE: The ASU Experience | 1 |  |  |
| FSE 100: Introduction to Engineering OR School approved elective | 2 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| 9. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-29 Credit Hours Critical course signified by 9 | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| 4 PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| 4 PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 3 30-44 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| 4 MAE 212: Engineering Mechanics | 4 | C | - CRITICAL REQUIREMENT: <br> Complete 10 critical courses by end of term 3. ENG 101 \& 107 are not part of the this course count. |
| 4 MAT 275: Modern Differential Equations (MA) | 3 | C |  |
| 1 PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 | C |  |
| 4 PHY 132: University Physics Laboratory II (SQ) | 1 | C |  |
| MAE 214: Computer-Aided Engineering I | 1 | C |  |
| MAT 267: Calculus for Engineers III (MA) | 3 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| - Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 45-61 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |



Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Mechanical Engineering (Computational and Mathematical Mechanics), BSE

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESMAECBSE

| Term 1 0-13 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CHM 114: General Chemistry for Engineers (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses. <br> - ASU Math Placement Exam score determines placement in Mathematics course. <br> - ASU 101-MAE and FSE 100 required for freshmen and should be completed first semester. Non-freshmen see Advisor for petitioning replacement electives. <br> - CHM 113 is a prerequisite for CHM 116 and does not apply towards degree credit. <br> - If ENG 105 taken, a 3 hr applicable elective must also be taken prior to graduation. See Advisor. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101-MAE: The ASU Experience | 1 |  |  |
| FSE 100: Intro to Engineering OR School approved elective | 2 | C |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 2 14-29 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 1 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| 1 PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| CSE 100: Principles of Programming with C++ (CS) OR CSE 110: Principles of Programming with Java (CS) | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |

Term hours subtotal: 16

| Term 3 30-44 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 MAE 212: Engineering Mechanics | 4 | C | - CRITICAL REQUIREMENT: Complete 10 critical courses by end of term 3. ENG 101 \& 107 are not part of the this course count. |
| 4 MAT 275: Modern Differential Equations (MA) | 3 | C |  |
| 4 PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 | C |  |


| Term 4 45-60 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: |
| 4. MAE 213: Solid Mechanics | 3 | C |  |
| 1. MAE 240: Thermofluids I | 4 | C |  |
| MAT 343: Applied Linear Algebra | 3 | C |  |
| MSE 250: Structure and Properties of Materials | 3 | C |  |
| PHI 103: Principles of Sound Reasoning (L or HU) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 61-77 Credit Hours | Hours | Minimum Grade | Notes |
| BME 111: Engineering Perspectives on Biological Systems OR <br> BIO 181: General Biology I (SQ) OR <br> BIO 201: Human Anatomy and Physiology I | 3-4 |  |  |
| EEE 202: Circuits I | 4 | C |  |
| MAE 322: Structural Mechanics | 4 | C |  |
| MAE 340: Thermofluids II | 3 | C |  |
| MAE 384: Numerical Methods for Engineers (CS) | 3 | C |  |
| Term hours subtotal: | 17-18 |  |  |
| Term 6 78-90 Credit Hours | Hours | Minimum Grade | Notes |
| MAE 318: Sensors and Controls | 5 | C |  |
| MAE 323: Computer-Aided Engineering II | 2 | C |  |
| MAE 342: Principles of Mechanical Design | 3 | C |  |
| MAE 471: Computational Fluid Dynamics | 3 | C |  |
| Term hours subtotal: | 13 |  |  |
| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |
| MAE 488: Mechanical Engineering Design I | 3 | C |  |
| MAE 491: Experimental Mechanical Engineering (L) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Complete 2 courses: <br> Upper Division Technical Elective | 6 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| MAE 400: Engineering Profession (L) | 3 | C |  |
| MAE 489: Mechanical Engineering Design II | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Upper Division Technical Elective | 3 | C |  |
| Term hours subtotal: | 15 |  |  |

Upper Division Technical Electives
IEE 300: Economic Analysis for Engineers
MAE 3**
MAE $4^{* *}$

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum

## General University Requirements Legend

General Studies Core Requirements:

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)

| Cumulative GPA: 2.00 minimum | - Literacy and Critical Inquiry (L) | - Historical Awareness (H) |
| :--- | :--- | :--- |
| Total hrs at ASU: 30 minimum | - Mathematical Studies (MA) |  |
| Hrs Resident Credit for | - Computer/Statistics/Quantitative Applications | First-Year Composition |
| Academic Recognition: 56 minimum | (CS) |  |
| Total Community College Hrs: 64 maximum | - Humanities, Fine Arts and Design (HU) |  |
|  | - Social and Behavioral Sciences (SB) |  |
|  | - Natural Science - Quantitative (SQ) |  |
|  | - Natural Science - General (SG) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Mechanical Engineering (Energy \& Environment), BSE

Ira A. Fulton Schools of Engineering
Campus:Tempe
ESMAEEBSE

| Term 1 0-13 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHM 114: General Chemistry for Engineers (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses. <br> - ASU Math Placement Exam score determines placement in Mathematics course. <br> - ASU 101-MAE and FSE 100 required for freshmen and should be completed first semester. Non-freshmen see Advisor for petitioning replacement electives. <br> - CHM 113 is a prerequisite for CHM 116 and does not apply towards degree credit. <br> - If ENG 105 taken, a 3 hr applicable elective must also be taken prior to graduation. See Advisor. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| \% MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101-MAE: The ASU Experience | 1 |  |  |
| FSE 100: Intro to Engineering OR School approved elective | 2 | C |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13 |  |  |


| Term 2 14-29 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| 4 PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| 1. PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 30-44 Credit Hours Critical course signified by ${ }^{\text {! }}$ | Hours | Minimum Grade | Notes |
| 4 MAE 212: Engineering Mechanics | 4 | C | - CRITICAL REQUIREMENT: complete 10 critical courses by end of term 3. ENG 101 \& 107 are not part of the this course count. |
| 4 MAT 275: Modern Differential Equations (MA) | 3 | C |  |
| 4 PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 | C |  |
| 1 PHY 132: University Physics Laboratory II (SQ) | 1 | C |  |
| MAE 214: Computer-Aided Engineering I | 1 | C |  |
| MAT 267: Calculus for Engineers III (MA) | 3 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 9. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Minimum |  |  |  |


| Term 4 45-60 Credit Hours Critical course signified by |  | Hours | Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 1. MAE 213: Solid Mechanics |  | 3 | C |  |
| 4. MAE 240: Thermofluids I |  | 4 | C |  |
| CHM 231: Elementary Organic Chemistry (SQ) |  | 3 | C |  |
| MAT 343: Applied Linear Algebra |  | 3 | C |  |
| MSE 250: Structure and Properties of Materials |  | 3 | C |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 5 61-77 Credit Hours |  | Hours | Minimum Grade | Notes |
| BIO 319: Environmental Science (Nonmajor) (G) OR <br> BIO 320: Fundamentals of Ecology OR <br> BIO 181: General Biology I (SQ) OR <br> BIO 182: General Biology II (SG) OR <br> BME 111: Engineering Perspectives on Biological Systems |  | 3-4 | C |  |
| EEE 202: Circuits I |  | 4 | C |  |
| MAE 322: Structural Mechanics |  | 4 | C |  |
| MAE 340: Thermofluids II |  | 3 | C |  |
| MAE 384: Numerical Methods for Engineers (CS) |  | 3 | C |  |
|  | Term hours subtotal: | 17-18 |  |  |
| Term 6 78-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| MAE 318: Sensors and Controls |  | 5 | C | - 6hrs minimum in both SB and HU required overall. |
| MAE 323: Computer-Aided Engineering II |  | 2 | C |  |
| MAE 342: Principles of Mechanical Design |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) OR Social and Behavioral Sciences (SB) |  | 3 |  |  |
|  | Term hours subtotal: | 13 |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| GCU 364: Energy in the Global Arena (SB \& G) OR PUP 190: Sustainable Cities ((HU or SB) \& G) |  | 3 |  |  |
| MAE 482: Thermodynamics |  | 3 | C |  |
| MAE 491: Experimental Mechanical Engineering (L) |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Technical Elective |  | 6 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| GPH 314: Global Change (HU \& G) OR PHI 310: Environmental Ethics (HU) |  | 3 |  |  |
| MAE 400: Engineering Profession (L) |  | 3 | C |  |
| MAE 446: Energy Systems Design |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Technical Elective |  | 6 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Upper Division Technical Electives |  |  |  |  |
| IEE 300: Economic Analysis for Engineers |  |  |  |  |
| MAE $3^{* *}$ |  |  |  |  |
| MAE 4** |  |  |  |  |
| Two technical electives must be in the "Energy and Environment" area and the other two chosen from the approved listed of MAE technical electives. MAE 484 is not permitted. |  |  |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## Barrett Academic Course Requirements

Honors students must maintain high standards of academic performance and show progress toward completion of graduation requirements in their disciplinary majors and in Barrett. In order to graduate from Barrett, students must complete the following, which includes a total of 36 credit hours of honors course work:

1. HON 171 and HON 272/273/274, The Human Event, must be completed in sequence during a student's first two semesters in the college.
2. Thirty additional credit hours of honors course work must be earned with a letter grade of " C " $(2.00)$ or higher. This may include HON prefix classes, honors sections of classes, honors enrichment contracts or any automatic honors courses such as ENG 105 (in-person sections), CHM 117, CHM 118, PHY 333, or graduatelevel courses.
3. Included in the 36 credit hours of honors course work are at least 18 hours of upper-division or graduatelevel honors credits for an earned letter grade of " $C$ " (2.00) or higher, including six credit-hours of honors course work outside the academic major. Students should investigate specialized honors, upper-division tracks within their majors.
4. Those admitted as upper-division transfer students (defined as 48 post-high school university credits completed by the time of planned enrollment in Barrett) must complete a three-credit, 300-level HON special topics course in addition to the 18 required hours of upper-division honors course work. Six of the 21 honors credits must be outside the academic major. A total of 21 hours of upper-division honors course work are required for these upper division transfers because they do not have time to complete all 36 honors hours.
5. Students are required to complete an honors thesis or creative project for at least three credit-hours, though students are encouraged to complete six credit-hours of thesis or creative project work. These credit hours may be included in the 18 required hours of upper-division, honors course work. The honors thesis or creative project is launched with a prospectus due one academic year before the defense. The final copy of the honors thesis or creative project must be filed by the posted deadline during the student's graduation semester.
6. ASU graduation requirements in an academic major must be met.
7. Students must maintain a cumulative ASU GPA of 3.25 or higher.

Barrett course requirements may be met in a variety of ways. There are two specific required courses for first-year students. Only courses in which a student receives a grade of " $C$ " (2.00) or higher may be used to meet Barrett requirements.

Those entering the college as lower-division students may take as many as 18 lower-division honors credits, which include HON 171 and 272/273/274 The Human Event, and at least 18 upper-division credits (total honors credits must be 36). HON 171, 271, 272, 273 are cross-disciplinary seminars that acquaint students with ideas that form the foundation of a university education and emphasize critical thinking, discussion and writing.

Those who enter as upper-division students must take 21 upper-division honors credits, including a required 300level honors course. Junior-level seminar courses introduce students to critical thinking, discussion and writing in a
topical area chosen by the instructor. All students are expected to complete this course no later than the first or second semester after transferring.

Departmental honors-only courses are limited to honors students and others who receive special permission from the instructor to enroll. Enrollment in these courses is limited. Compared to their non-honors equivalents, these courses are designed to offer a richer, more complex intellectual experience appropriate to the discipline and the level of the course for all students enrolled. Other disciplinary honors courses group honors students in small cohorts to work on research projects of common interest.

Honors enrichment contracts are available in many departmental courses allowing honors students to contract with the instructor of designated non-honors courses to earn honors credit by pursuing enrichment activities, which include supplemental sessions with the instructor. Honors enrichment contracts must be filed by the student during the first four weeks of class and completed during the semester in which the course is offered. The enrichment contract form offers guidelines to aid students and faculty in developing appropriate contracts.

Course numbers listed in the online ASU schedule of classes as 298/492 Honors Directed Study, 493 Honors Thesis, 497 Honors Colloquium, all classes with the HON prefix, and those with departmental prefix that carry the honors designation as a notation are reserved for students in Barrett and always count for honors credit. Students may receive credit for more than one of each of these courses in a given department.

The departmental course with the number 493 is reserved for honors students completing their honors thesis or creative project. A student may enroll for this course only with the approval of the sponsoring academic department and of the faculty member who serves as the student's thesis or creative project director. Course numbers listed in the online ASU schedule of classes as 493 fulfill the student's upper-division literacy and critical inquiry (L) General Studies requirement.

There are certain courses that carry automatic honors credit. These include ENG 105 (any in-person section), CHM 117, CHM 118, and PHY 333. Graduate level courses automatically earn honors credit.

## 4 1 ARIZONA State UNIVERSITY

## 2011-2012 Major Map Journalism \& Mass Communication, BA

Walter Cronkite School of Journalism \& Mass Comm
Campus:Downtown Phoenix
CSJMCBA

| Term 1 0-15 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determined placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in MAthematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students <br> - Students other than first-time freshmen may take the English Grammar Exam one time to attempt to test out of JMC 101 Grammar for Journalists. |
| 4 JMC 101: Grammar for Journalists |  | 1 | Y |  |
| 4 JMC 110: Principles and History of Journalism (SB) |  | 3 | C |  |
| ASU 101: The ASU Experience |  | 1 | C |  |
| MAT 142: College Mathematics (MA) |  | 3 |  |  |
| Second Language |  | 4 | C |  |
| 4. Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 2 16-31 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| 4 JMC 201: News Reporting and Writing (L) |  | 3 | C |  |
| HST 109: United States to 1865 ((HU or SB) \& H) OR HST 110: United States Since 1865 (SB \& H) |  | 3 |  |  |
| Computer/Statistics/Quantitative Applications (CS) |  | 3 |  |  |
| Second Language |  | 4 | C |  |
| 4. Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 3 32-48 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |


| JMC 301: Intermediate Reporting and Writing (Print) (L) OR |  |  |
| :--- | :--- | :--- |
| JMC 315: Intermediate Reporting and Writing (Broadcast) (L) AND |  |  |
| JMC 366: Journalism Ethics and Diversity | 3 | C |
| JMC 305: Online Media | 3 | C |
| SOC 101: Introductory Sociology (SB) | 3 |  |
| Natural Science - Quantitative (SQ) | 4 |  |
| Second Language | 4 | C |

Minimum 2.50 GPA ASU Cumulative.
Complete First-Year Composition requirement.
Complete Mathematics (MA) requirement.
Term hours subtotal: 17

| Term 4 49-64 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| JMC 301: Intermediate Reporting and Writing (Print) (L) OR JMC 315: Intermediate Reporting and Writing (Broadcast) (L) AND JMC 366: Journalism Ethics and Diversity | 3 | C | - Must complete JMC 366 and 301 or JMC (depending on |
| POS 110: Government and Politics (SB) OR POS 310: American National Government (SB) | 3 |  | track) by end of term 4 with a grace of " C " of better |


| HST Elective | 3 |  |
| :--- | :--- | :--- |
| Second Language AND <br> Global Awareness (G) | 4 | C |

Minimum 2.50 GPA ASU Cumulative.
Term hours subtotal: 16

| Term 5 65-80 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| JMC 313: Introduction to Editing OR JMC 345: Videography |  | 3 | C | - Advanced Skills course should be selected in consultation with academic advisor |
| JMC 484: Internship |  | 3 | Y |  |
| PHI course (HU) |  | 3 |  |  |
| Upper Division Advanced Skills Course |  | 3 | C |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) |  | 4 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 6 81-93 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Advanced Skills Course |  | 3 | C | - Advanced Skills course should be selected in consultation with academic advisor |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) |  | 3 |  |  |
| JMC 402: Mass Communication Law |  | 3 | C |  |
| Related Area Course |  | 3 | C |  |
| Elective |  | 1 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 13 |  |  |
| Term 7 94-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Advanced Skills Course |  | 3 | C | - Advanced Skills course should be selected in consultation with academic advisor |
| PGS 101: Introduction to Psychology (SB) |  | 3 |  |  |
| Cultural Diversity in the U.S. (C) OR Elective |  | 3 |  |  |
| Upper Division Related Area Course |  | 6 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| JMC 473: The Business and Future of Journalism OR JMC 494: Public Relations Research |  | 3 | C |  |
| JMC OR MCO Upper Division Elective |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Upper Division Related Area Course |  | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 12 |  |  |


| Core Values |
| :--- |
| JMC 110: Principles and History of |
| Journalism (SB) |
| MCO 110: Principles and History of |
| Journalism (SB) |
| MCO 120: Media and Society (SB) |
| JMC 366: Journalism Ethics and Diversity |
| JMC 473: The Business and Future of |
| Journalism |
| JMC 494: Business of Journalism |

Basic Skills
JMC 101: Grammar for Journalists
JMC 194: Grammar for Journalists
JMC 201: News Reporting and Writing (L)
JMC 301: Intermediate Reporting and Writing
(Print) (L)
JMC 315: Intermediate Reporting and Writing
(Broadcast) (L)
JMC 313: Introduction to Editing
JMC 345: Vian

Statistics
STP 220: Conceptual Statistics
STP 226: Elements of Statistics (CS)
SOC 390: Social Statistics I (CS)
POS 401: Political Statistics (CS)
JUS 302: Basic Statistical Analysis in Justice Studies (CS)

SWU 321: Statistics for Social Workers (CS)

JMC 402: Mass Communication Law
MCO 402: Mass Communication Law

| U.S. History | English Literature | Multimedia |
| :---: | :---: | :---: |
| HST 109: United States to 1865 ((HU or SB) \& H) | ENG 201: World Literature (HU \& H \& G) | JMC 305: Online Media |
|  | ENG 202: World Literature (HU \& H) | JMC 425: Online Media |
| HST 110: United States Since 1865 (SB \& H) |  |  |
| HST 313: American Cultural History to 1865 (SB \& H) | ENG 204: Introduction to Contemporary Literature (HU) |  |
|  | ENG 221: Survey of English Literature (HU) |  |
| HST 314: American Cultural History Since 1865 ((HU or SB) \& H) | ENG 222: Survey of English Literature (HU |  |
| HST 319: U.S. Urban History to 1850 (SB \& H) | \& H) |  |
|  | ENG 241: Literatures of the United States to 1860 (HU) |  |
| HST 320: U.S. Urban History since 1850 (SB \& H) | 1860 (HU) |  |
|  | ENG 242: Literatures of the United States, 1860 to Present (HU) |  |
| HST 325: Immigration and Ethnicity in the United States (SB \& H \& C) | ENG 303: Classical Backgrounds of English |  |
| HST 327: Women in US History 1600 to 1880 ((HU or SB) \& C \& H) | Literature (HU) |  |
|  | ENG 321: Shakespeare (L or HU) |  |
| HST 328: Women in US History, 1880-1980 ((HU or SB) \& C \& H) | ENG 326: English Drama 1660-1800 (HU) |  |
| HST 329: Women in 20th-Century US West ( $\mathrm{H} \& \mathrm{C}$ ) | ENG 328: The Novel to Jane Austen (HU \& H) |  |
| HST 331: Mexican American History to 1900 (SB \& H \& C) | ENG 329: 19th-Century British Fiction (L or HU) |  |
| HST 332: Mexican American History Since 1900 (SB \& H \& C) | ENG 331: American Drama (L or HU) |  |
|  | ENG 333: American Ethnic Literature ((L or HU \& C) |  |
| HST 333: African American History to 1865 (SB \& H \& C) |  |  |
|  | ENG 337: Major American Novels (L or HU) |  |
| HST 334: African American History Since 1865 ((HU or SB) \& C \& H) | ENG 342: 20th-Century British and Irish Literature (HU) |  |
| HST 337: American Indian History to 1900 ((HU or SB) \& C \& H) | ENG 352: Short Story (L or HU) |  |
| HST 338: American Indian History since 1900 ((HU or SB) \& C \& H) | ENG 353: African American Literature: Beginnings through the Harlem Renaissance ((L or HU$) \& \mathrm{C}$ ) |  |
| HST 341: U.S. West 19th Century (SB \& H) | ENG 354: African American Literature: |  |
| HST 342: US West 20th Century (SB \& H) | Harlem Renaissance to the Present ((L or HU) \& C) |  |
| HST 343: American Southwest ((L or SB) \& H) | ENG 355: European Dramatic Traditions (L or HU) |  |
| HST 405: Colonial American History to 1763 (SB \& H) | ENG 356: The Bible as Literature (HU) |  |
| HST 406: American Revolution/1763-1789 <br> (SB \& H) | ENG 359: American Indian Literature ((L or $\mathrm{HU}) \& \mathrm{C})$ |  |
| HST 407: Early U.S. Republic/1789-1850 ((L or SB) \& H) | ENG 360: Western American Literature (L or HU) |  |
| HST 408: Civil War and Reconstruction ((L or SB) \& H) | ENG 363: Transborder Mexican and Chicano/a Literature of Southwest North America ((L or HU) \& C) |  |
| HST 409: Emergence Modern U.S. 1877-1918 (SB \& H) | ENG 364: Women and Literature (HU) |  |
| HST 410: Modern U.S., 1918 to1945 (SB \& H) | ENG 476: Oral Traditions ((L or HU or SB) \& C) |  |
| HST 411: Postwar U.S., 1945-1973 (SB \& H) | HON 172: The Human Event: Humanities Focus ((L or HU )\& H) |  |
| HST 412: Contemporary U.S./1973- Present (SB \& H) |  |  |
| HST 414: The Modern U.S. Economy (SB \& H) |  |  |
| HST 415: Unequal Sisters/Women-Pol/Cult ( L or SB) \& H \& C) |  |  |

HST 417: Topics in Mexican American History (SB \& H \& C)

HST 456: The Vietnam War (SB \& G \& H)

| Philosophy | Advanced Skills Course | Related Area Courses |
| :---: | :---: | :---: |
| HON 171: The Human Event ((L or HU )\& H) | JMC 310: Public Relations | ASB Elective |
|  | JMC 320: Newscast Producing | ASM Elective |
| PHI 101: Introduction to Philosophy (HU) |  |  |
| PHI 103: Principles of Sound Reasoning (L or $\mathrm{HU})$ | JMC 325: Multimedia Reporting | ACC Elective |
|  | JMC 330: Television Reporting | ECN Elective |
| PHI 105: Intro to Ethics (HU) | JMC 351: Photojournalism I | FIN Elective |
| PHI 305: Ethical Theory (HU) | JMC 413: Advanced Editing | LES Elective |
| PHI 306: Applied Ethics (HU) | JMC 414: Graphic Design for Print and Web | MGT Elective |
| PHI 309: Social and Political Philosophy$(\mathrm{HU})$ | JMC 415: Writing for Public Relations | MKT Elective |
|  | JMC 417: Public Relations Campaigns | REA Elective |
|  | JMC 437: Documentary Production | ENG Elective |
|  | JMC 440: Magazine Writing | FAS Elective |
|  | JMC 445: Science and Medical Writing | GPH Elective |
|  | JMC 451: Photojournalism II | GCU Elective |
|  | JMC 460: Advanced Online Media | HST Elective |
|  | JMC 465: Precision Journalism | COM Elective |
|  | JMC 470: Depth Reporting | JUS Elective |
|  | JMC 475: Television Newscast Production | POS Elective |
|  | JMC 478: Cronkite News Service | REL Elective |
|  | JMC 494: Advanced Digital Media Entrepreneurship | SOC Elective |
|  | JMC 494: Digital Media Entrepreneurship | THE Elective |
|  | JMC 494: Issues in Coverage of Business and | THP Elective |
|  | the Economy | WSH Elective |
|  | JMC 494: New Media Innovation Lab | WST Elective |
|  | JMC 494: Public Relations Lab |  |
|  | JMC 494: Reporting on Business and the Economy |  |
|  | JMC 498: Latino and Transnational Issues |  |

[^15]Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## Bachelor of Applied Science Degree

| Student Name | ID. Number |
| :---: | :---: |
| A.A.S. Degree | Date A.A.S. Degree Granted |
| A.A.S. Degree Granting Institution | ASU Catalog Year 2011-2012 |
| B.A.S. Academic Department Technical Communication | Advisor |
| Number of Upper Division Transfer Credits | Expected Graduation Date |
| Institution of Transfer Course Work (Upper Division Only) |  |

## General Studies Sequence (19 Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |
| Science - ASC 325 | 4 |  |  |  |
| Upper-division Literacy [L] | 3 |  |  |  |
| Upper-division Humanities [HU] and [H] [C] | 3 |  |  |  |
| Upper-division Social Science [SB] | 3 |  |  |  |
| General Studies [HU or SB] and [G] | 3 |  |  |  |
| Sub | 19 | Hrs. |  |  |

## B.A.S. Area Core (15 Hours)

| ASU |  |  |  |  |  |  | Transfer |  | Transfer From |  | Grade |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TWC 301 General Principles of Multimedia Writing | 3 |  |  |  |  |  |  |  |  |  |  |
| TWC 401 Principles of Technical Communication | 3 |  |  |  |  |  |  |  |  |  |  |
| TWC 347 Written Communication for Managers | 3 |  |  |  |  |  |  |  |  |  |  |
| STP 420 Introductory Applied Statistics | 3 |  |  |  |  |  |  |  |  |  |  |
| TWC 421 Principles of Writing with Technology | 3 |  |  |  |  |  |  |  |  |  |  |

Sub Total
15 Hrs


Total (120 Hours Minimum)

## Advisor Comments

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Total Upper Division Hours $\qquad$

Total ASU Resident Hours $\qquad$

Student Signature

| Date |
| :---: |
| Date |


| Dean Signature |
| :--- |
| University Signature |


| Date |
| :---: |
| Date |

## 2011-2012 Major Map <br> Communication, BA

School of Letters \& Sciences
Campus:Downtown Phoenix, Polytechnic
LSCOMBA

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. COM 100: Introduction to Human Communication (SB) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ASU 101: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 2** Second Language: Requirement satisfied through the following: <br> * Completion of secondary education at a school in which the language of instruction is not English; <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV; <br> * Completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country. | 4 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-30 Credit Hours Critical course signified by 4 | Hours | Minimum Grade | Notes |
| 4 COM 207: Introduction to Communication Inquiry | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| $2^{* *}$ Second Language: Requirement satisfied through the following: <br> * Completion of secondary education at a school in which the language of instruction is not English; <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV; <br> * Completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country. | 4 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-47 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 4 COM 230: Small Group Communication (SB) | 3 | C |  |
| 2** Second Language: Requirement satisfied through the following: <br> * Completion of secondary education at a school in which the language of instruction is not English; <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV; <br> * Completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country. | 4 |  |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 4 48-64 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |


| (1. COM 225: Public Speaking (L) | 3 | C | - Complete all critical courses by end of term 4. <br> - Student must select one of three COM concentration options and take all COM concentration courses within the same concentration. |
| :---: | :---: | :---: | :---: |
| $2^{* *}$ Second Language: Requirement satisfied through the following: <br> * Completion of secondary education at a school in which the language of instruction is not English; <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV; <br> * Completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country. | 4 |  |  |
| Upper Division Concentration Course | 3 | C |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 5 65-78 Credit Hours | Hours | Minimum Grade | Notes |
| COM 308: Advanced Research Methods in Communication (L) | 3 | C |  |
| COM Upper Division Elective | 3 | C |  |
| Upper Division Social and Behavioral Sciences (SB) OR Upper Division Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Complete 2 courses: Elective | 5 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 6 79-93 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> Upper Division Concentration Course | 6 | C |  |
| Global Awareness (G) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours | Hours | Minimum Grade | Notes |
| Upper Division Concentration Course | 3 | C |  |
| COM Upper Division Elective | 3 | C |  |
| Historical Awareness (H) | 3 |  |  |
| Complete 2 courses: Upper Division Elective | 6 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> Upper Division Concentration Course | 6 | C |  |
| COM Upper Division Elective | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 12 |  |  |

- Interdisciplinary Concentrations (18 credit hours) - Students must select one of the following three interdisciplinary concentrations: Law and Community Advocacy, Communication and Culture, or Communication, Technology and Society. Within the selected interdisciplinary concentration, students must select nine credit hours of upper division communication courses, and nine credit hours of upper division non-communication courses.

| Communication, Technology and Society | Law and Community Advocacy | Communication and Culture |
| :---: | :---: | :---: |
| COM 319: Persuasion and Social Influence (SB) | COM 312: Communication, Conflict, and Negotiation | COM 316: Gender and Communication (SB \& C) |
| COM 394: Communication in the Electronic Age | COM 316: Gender and Communication (SB \& C) | COM 323: Communication Approaches to Popular Culture (C) |
| COM 421: Rhetoric of Social Issues (HU) | COM 319: Persuasion and Social Influence (SB) | COM 371: Language, Culture, and Communication (SB \& C \& G) |

COM 320: Communication and Consumerism

(SB) \begin{tabular}{l}
COM 320: Communication and Consumerism <br>
(SB)

 

COM 463: Intercultural Communication <br>
Theory and Research (SB \& G)
\end{tabular}

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> English, BA

School of Letters \& Sciences
Campus:Polytechnic
LSENGBA

| Term 1 0-13 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ASU 101: The ASU Experience |  | 1 |  |  |
| MAT 142: College Mathematics (MA) |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |
|  | Term hours subtotal: | 13 |  |  |


| Term 2 14-29 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 30-45 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |


| ENG 200: Critical Reading and Writing About Literature (L or HU) | 3 | C |
| :--- | :---: | :---: |
| ENG Lower Division Elective | 3 | C |
| Lower Division ENG Literature Course | 3 | 4 |
| Natural Science - Quantitative (SQ) | 3 | 3 |
| Social and Behavioral Sciences (SB) |  |  |

- ENG 200-level literature course is a recommended pre-requisite to upper division ENG courses.

Complete First-Year Composition requirement.
1 Complete Mathematics (MA) requirement.
Maintain 2.00 GPA in Major Courses.
Term hours subtotal: 16

| Term 4 46-60 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Literature and Culture Before 1800 Course | 3 | C |  |
| Rhetoric, Writing and Linguistics Course | 3 | C |  |
| Global Awareness (G) | 3 |  |  |
| Historical Awareness (H) | 3 |  |  |
| Lower Division Elective | 3 |  |  |
| Maintain 2.00 GPA in Major Courses. |  |  |  |
|  | Term hours subtotal: 15 |  |  |
| Term 5 61-75 Credit Hours | Hours | Minimum Grade | Notes |
| Upper Division Ethnicity, Gender and Environment Course | 3 | C |  |
| Upper Division Elective | $3$ |  |  |


| Lower Division Elective | 3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Complete 2 courses: ENG Lower Division Elective |  | 6 | C |  |
| Maintain 2.00 GPA in Major Courses. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Literature and Culture After 1800 Course |  | 3 | C |  |
| ENG Lower Division Elective |  | 3 | C |  |
| ENG Lower Division Elective |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
| Maintain 2.00 GPA in Major Courses. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| ENG 498: Pro-Seminar |  | 3 | C |  |
| Upper Division ENG course (L) |  | 3 | C | College may take ENG 493: |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) |  | 3 |  | Honors Thesis in place of ENG 498: Pro-Seminar. |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
| Maintain 2.00 GPA in Major Courses. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> ENG Upper Division Elective |  | 6 | C |  |
| Complete 3 courses: <br> Upper Division Elective |  | 9 |  |  |
| Maintain 2.00 GPA in Major Courses. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |


| Lower Division ENG Literature Course | Literature and Culture After 1800 | Literature and Culture Before 1800 |
| :---: | :---: | :---: |
| ENG 204: Introduction to Contemporary <br> Literature (HU) | ENG 320: Medievalism in Modern Culture | ENG 201: World Literature (HU \& H \& G) |
|  | ENG 335: American Poetry | ENG 202: World Literature (HU \& H) |
| ENG 222: Survey of English Literature (HU \& H) | ENG 337: Major American Novels (L or HU) | ENG 221: Survey of English Literature (HU) |
| ENG 242: Literatures of the United States, 1860 to Present (HU) | ENG 352: Short Story (L or HU) | ENG 241: Literatures of the United States to 1860 (HU) |
|  | ENG 354: African American Literature: Harlem Renaissance to the Present ((L or HU) \& C) | ENG 303: Classical Backgrounds of English Literature (HU) |
|  | ENG 359: American Indian Literature ((L or $\mathrm{HU}) \& \mathrm{C}$ ) | ENG 321: Shakespeare (L or HU) |
|  | ENG 363: Transborder Mexican and Chicano/a Literature of Southwest North America ((L or HU) \& C) | ENG 328: The Novel to Jane Austen (HU \& H) |
|  | ENG 367: Environmental Issues in Literature and Film (L or HU) |  |
|  | ENG 366: Literature on Film |  |
|  | ENG 464: Great Directors (L or HU) |  |
|  | ENG 466: Studies in International Film ((L or HU) \& G) |  |
|  | ENG 467: American Film Musicals (L or HU) |  |
|  | ENG 471: Literature for Young Adults (HU) |  |
|  | null null: null |  |
| Ethnicity, Gender and Environment | Rhetoric, Writing and Linguistics Academic Catalog Archive 2011-2 | $121132$ |

ENG 317: Cross-Cultural Writing ((L or HU)
\& G) ENG 210: Introduction to Creative Writing

## Notes:

- Additional Notes:

1. Eighteen credit hours of upper division English (300-400) are required with at least twelve hours taken in the School of Letters and Sciences.
2. Up to four writing certificate courses can be used in both the major and the certificate.
3. PREPARING FOR GRADUATE SCHOOL: Take as many 400 -level ENG courses as possible.
4. There is room in this degree to add a concurrent degree, minor, or certificate.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

# Major Map: General Studies - <br> Bachelor of General Studies (B.G.S.) <br> School of Letters and Sciences |Catalog Year: 2011-2012 

|  | I. First-Year Composition (3-6 hours) | Total <br> Hours | UD <br> Hours | Res <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| Grade |  |  |  |  |
| ENG 101: First-Year Composition (3) and |  |  |  |  |
| ENG 102: First-Year Composition (3) or, if eligible |  |  |  |  |
| ENG 105: Advanced First-Year Composition (3) |  |  |  |  |

## II. University General Studies (35 hours)

Humanities, Fine Arts, and Design \& Social and Behavioral Sciences (15
hours) Required: 15 hours combined; 6 hours in one area, 9 hrs in the other AND one course must be upper division.

| $\mathrm{HU}:$ |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $\mathrm{HU}:$ |  |  |  |  |
| $\mathrm{SB}:$ |  |  |  |  |
| $\mathrm{SB}:$ |  |  |  |  |
| HU or SB: |  |  |  |  |

Natural Sciences (8 hours)

| SQ: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| SQ/SG: |  |  |  |  |

Mathematics \& Statistics/Computer Applications (6 hours)


Literacy \& Critical Inquiry (6 hours)

| $\mathrm{L}:$ |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Upper-division L: |  |  |  |  |

Awareness Areas (2 courses minimum and must fulfill all 3 areas)
Double counting is permissible between Awareness Areas, other courses that fulfill graduation requirements, and within the Awareness Areas.

| Global Awareness (G): |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Historical Awareness (H): |  |  |  |  |
| Cultural Diversity (C): |  |  |  |  |

## II. Major requirements



| III. BGS Clusters (36 hours) | Total Hours | $\begin{array}{\|c\|} \text { UD } \\ \text { Hours } \end{array}$ | Res Hours | Grade |
| :---: | :---: | :---: | :---: | :---: |
| Cluster \#1 |  |  |  |  |
| 1. |  |  |  |  |
| 2. |  |  |  |  |
| 3. |  |  |  |  |
| Cluster \#2 |  |  |  |  |
| 1. |  |  |  |  |
| 2. |  |  |  |  |
| 3. |  |  |  |  |
| Cluster \#3 |  |  |  |  |
| 1. |  |  |  |  |
| 2. |  |  |  |  |
| 3. |  |  |  |  |
| Cluster \#4 |  |  |  |  |
| 1. |  |  |  |  |
| 2. |  |  |  |  |
| 3. |  |  |  |  |

## IV. Electives

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## Please Note:

- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics course
- ASU 101 or College specific equivalent First Year Seminar required of all freshman students
- A grade of C or better is required in all major courses
- Majors must maintain at least a 2.00 ASU cumulative GPA and 2.00 major GPA
- Complete First-Year Composition requirement by the end of term 3
- Complete Mathematics (MA) requirement by the end of term 3
- Twenty-one hours in the major must be upper division
- Cluster classes in the major cannot be used for minor classes or other clusters
- Consult the ASU catalog for more information about General Studies requirements
- Elective hours needed may change and are dependent on how other requirements are satisfied
- Evaluation of transfer courses for cluster requirements should be directed to the appropriate departmental advisor.
- Questions regarding cluster requirements, course prerequisites and class registration should be directed to an advisor in the department or college offering the cluster.
- See ASU catalog for information about repeating courses
- This assessment is supplemental to your DARS report. To obtain a copy of your DARS report, go to: http://www.asu.edu/interactive

Cluster Choices: For cluster choices, see
http://sls.asu.edu/gs/clusters.html. Students will choose four [4] clusters and at least three [3] classes within each one.

## 4) ARIZONA State UNIVERSITY

## 2011-2012 Major Map <br> History, BA

School of Letters \& Sciences
Campus:Polytechnic
LSHISBA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 HST Lower Division Elective | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines |
| ASU 101: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | placement into first-year composition courses <br> - ASU Math Placement Exam |
| MAT 142: College Mathematics (MA) | 3 | C | score determines placement in Mathematics course |
| Humanities, Fine Arts and Design (HU) | 3 |  | - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| Lower Division Elective | 3 |  |  |
|  | 16 |  |  |


| Term 2-17-32 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 HST Lower Division Elective | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| $\begin{aligned} & \text { Natural Science - General (SG) OR } \\ & \text { Natural Science - Quantitative (SQ) } \end{aligned}$ | 4 |  |  |
| Lower Division Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 HST Lower Division Elective | 3 | C |  |
| Global Awareness (G) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Lower Division Elective | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |

Term hours subtotal:
16

| Term 4 49-63 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 Non-US Non-European HST Course | 3 | C |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Historical Awareness (H) | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Lower Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 64-78 Credit Hours | Hours | Minimum Grade | Notes |
| HST 300: Historical Inquiry AND Upper Division Literacy and Critical Inquiry (L) | 3 | C |  |


| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) |  | 3 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Upper Division Related Field |  | 3 | C |  |
| Lower Division Related Field |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Non-US Non-European HST Course |  | 3 | C |  |
| HST Upper Division Elective |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
| Lower Division Related Field |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| HST 498: Pro-Seminar AND <br> Upper Division Literacy and Critical Inquiry (L) |  | 3 | C | - Students in the Barrett Honors |
| HST Upper Division Elective |  | 3 | C | College may take HST 493: |
| Complete 2 courses: <br> Upper Division Related Field |  | 6 | C | 498: Pro Seminar |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| HST Upper Division Elective |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Complete 2 courses: <br> Lower Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 12 |  |  |

- Additional courses such as 294, 394 and 494 may be approved for use in the Non-US, Non-European area by the history academic advisor.

```
Non-US Non-European History Courses
HST 201: Historical Themes in Asia
HST 203: Historical Themes in Latin
America (SB & H)
HST 240: Introduction to Southeast Asia
((HU or SB) & G)
HST 303: Studies in Asian History
HST 305: Studies in Latin American History
HST 307: Studies in African History
HST 375: Colonial Latin America (SB & H)
HST 376: Modern Latin America (SB & H)
HST 377: Women in Colonial Latin America
(H)
HST 378: Latin American Women: The
National Period (SB & G & H)
HST 379: Rebellion & Revolution/So Amer
HST 380: Cultural History of Latin America
(SB & H)
HST 383: China (SB & H)
HST 384: China (SB & G & H)
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HST 385: History of Chinese Medicine (HU
& H & G)
HST 386: Interpreting China's Classics ((L or
HU )& H)
HST 387: Japan ((L or SB) & H)
HST 388: Japan (SB & G & H)
HST 389: Japan Society and Values/Premod
HST 391: Modern Southeast Asia (SB & G &
H)
HST 443: The United States & Latin America
(SB & G & H)
HST 444: Latin American Independence ((L
or HU) & G & H)
HST 445: 20th-Century Cuba (SB & G & H)
HST 446: Colonial Mexico (SB & H)
HST 447: Modern Mexico (SB & H)
HST 448: Mexican/U.S. Border
HST 449: Mexican Immigration to the U.S.
((L or SB) & H & C)
HST 450: Postmodern Mexico ((L or HU) &
G & H)
HST 451: Chinese Cultural History ((HU or
SB) & H)
HST 452: Chinese Cultural History (SB & G
& H)
HST 453: The People's Republic of China
(SB & G & H)
HST 455: The United States and Japan (SB &
G & H)
HST 456: The Vietnam War (SB & G & H)
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## Notes:

- Additional Notes:

1. Twelve hours of upper division HST credits must be taken in the School of Letters and Sciences
2. Students will select a related field in consultation with a faculty mentor or School of Letters \& Sciences history academic advisor. The related field is comprised of 15 credit hours; nine credit hours must be upper division.
3. There is room in this degree to add a concurrent degree, a minor, or a certificate.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## Bachelor of Interdisciplinary Studies

Catalog: 2011-2012

| III. BIS Core (12 hours) |  |  |  |  |
| :--- | :---: | :---: | :---: | :--- |
| ² | Total <br> Hours | UD <br> Hours | Res <br> Hours | Grade |
| BIS 301: Foundations of Interdisciplinary Studies (L) | 3 | 3 | 3 |  |
| BIS 401: Applied Interdisciplinary Studies | 3 | 3 | 3 |  |
| BIS 402: Senior Seminar (L) | 3 | 3 | 3 |  |

IV. Concentration I (18-30 hours) ${ }^{2}$

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| :--- | :--- | :--- | :--- | :--- |
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V. Concentration II (18-30 hours) ${ }^{2}$

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## VI. Electives (4-40 or more hours) ${ }^{3}$

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|  |  |  |  |  | School of Letters \& Sciences

## ARIZONA STATE UNIVERSITY

| I. First Year Composition (3-6 hours) ${ }^{182}$ | ASU Hours | Trans Hours | Grade | $\begin{aligned} & \text { Upp } \\ & \text { Div } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| ENG 101:First Year Comp 1 (3) and |  |  |  |  |
| ENG 102:First Year Comp 2 (3) or, if eligible |  |  |  |  |
| ENG 105: Advance First Year Comp (3) |  |  |  |  |

Sub Total (I): 3-6

## II. University General Studies (35-37 hours)

Humanities/Fine Arts \& Social/Behavioral Sciences (15 hours) Required: 15 hours combined; 6 hours in one area, 9 hrs in the other AND one course must be upper division.

| HU: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| HU: |  |  |  |  |
| SB: |  |  |  |  |
| SB: |  |  |  |  |
| HU or SB: |  |  |  |  |
| Natural Sciences (8 hours) |  |  |  |  |
| SQ: |  |  |  |  |
| SQ/SG: |  |  |  |  |

Literacy and Critical Inquiry (6 hours)

| L: | BIS 301: Foundations of Interdis. Studies | Satisfied by major |
| :---: | :--- | :--- |
| L: | BIS 402: Senior Seminar | Satisfied by major |

Mathematics \& Statistics/Computer Applications (6 hours) ${ }^{1}$

| MA: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CS: |  |  |  |  |

Awareness Areas (2 courses minimum and must fulfill all 3 areas)
Double counting is permissible between Awareness Areas, other courses that fulfill graduation requirements, and within the Awareness Areas.

| Global Awareness (G): |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Historical Awareness (H): |  |  |  |  |
| Cultural Diversity (C): |  |  |  |  |

Sub Total (II): $\quad 35-37$

| Total Hours Required | Upper Division <br> Hours Required | Resident Hours <br> Required | Minimum GPA <br> required | Hours Required for ASU <br> Academic Recognition |
| :---: | :---: | :---: | :---: | :---: |
| 120 | 45 | 30 | 2.0 | 56 |
| Max Transfer Hours <br> Allowed | Max. 2-yr Transfer <br> Hours allowed with <br> AGEC completion | AGEC Completed? | AA Completed? |  |
|  | 75 | $\mathrm{Y} \square$ or $\mathrm{N} \square$ | $\mathrm{Y} \square$ or N $\square$ |  |
| 90 | 75 |  |  |  |

- For more information about the BIS degree in Organizational Studies, please go to: $\mathrm{http}: / / / \mathrm{sls}$.asu.edu/bis/org_ studies.htm|
- Course pre-requisites are available online at: http://catalog.asu.edu
- This check sheet is for reference only; please consult your DARS report for official information about your requirements:
http://mww.asu.edu/darswebstudent.

[^16]
## Bachelor of Liberal Studies

Catalog：2011－2012

| I．First Year Composition（3－6 hours）${ }^{182}$ | $\begin{array}{\|c} \begin{array}{c} \text { Total } \\ \text { Hours } \\ \hline \end{array} ⿳ ⺈ ⿴ 囗 十 一 ⿱ ⿴ 囗 十 丌 \\ \hline \end{array}$ | $\begin{array}{\|c} \hline \text { UD } \\ \text { Hours } \\ \hline \end{array}$ | Res Hours | Grade |
| :---: | :---: | :---: | :---: | :---: |
| ENG 101：First Year Comp 1 （3）and |  |  |  |  |
| ENG 102：First Year Comp 2 （3）or，if eligible |  |  |  |  |
| ENG 105：Advance First Year Comp（3） |  |  |  |  |

II．ASU Experience：（3 hours）${ }^{3}$

ASU 101：The ASU Experience $\quad |$|  |
| :--- | :--- | :--- | :--- |

## III．University General Studies（29－38 hours）

Humanities／Fine Arts \＆Social／Behavioral Sciences（15 hours）Required： 15 hours combined； 6 hours in one area， 9 hrs in the other AND one course must be upper division．

| HU： |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| HU： |  |  |  |  |
| SB： |  |  |  |  |
| SB： |  |  |  |  |
| HU or SB： | X |  |  |  |
| Natural Sciences（8 hours） |  |  |  |  |
| SQ： |  |  |  |  |
| SQ／SG： |  |  |  |  |

Literacy and Critical Inquiry（6 hours）

| L： | Met by BIS 370 |  |  |  |
| :---: | :---: | :---: | :---: | :--- |
| L： | Met by BIS 470 |  |  |  |

Mathematics \＆Statistics／Computer Applications（6 hours）${ }^{1}$

| MA： |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CS： |  |  |  |  |

Awareness Areas（2 courses minimum and must fuffill all 3 areas）
Double counting is permissible between Awareness Areas，other courses that fufiil graduation requirements，and within the Awareness Areas．

| Global Awareness（G）： |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Historical Awareness（H）： |  |  |  |  |
| Cultural Diversity（C）： |  |  |  |  |


| Total Hours <br> Required | Upper Division <br> Hours Required | ASU Resident <br> Hours Required | Max．2－yr Transfer <br> Hours allowed | Minimum GPA <br> required | ASU Resident Hours for <br> Academic Recognition |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 120 | 45 | 30 | 64 | 2.00 | 56 |

－For more information about the BLS please go to：htpp：／／sls．asu．edul／s／
－This check sheet is for reference only；please consult your ASU DARS report for official information about your requirements．
${ }^{1}$ Complete First－Year Composition and Mathematics（MA）requirement by the end of term 3.
${ }^{2}$ Grades of＂C＂or better are required for courses within this category．
${ }^{3}$ ASU 101 is required only of all freshmen．
${ }^{4}$ Please visit $\mathrm{http}: / / \mathrm{sls}$ ．asu．edu／ls／for a list of courses offered each semester that fulfill this requirement．Grades of＂C＂or better are required．
${ }^{5}$ Please visit http：／／sls．asu．edulls／for a list of courses offered each semester that fulfill this requirement．．Grades of＂C＂or better are required．

| IV．BLS Core（6 hours）${ }^{\mathbf{2}}$ | Total <br> Hours | UD <br> Hours | Res <br> Hours | Grade |
| :--- | :---: | :---: | :---: | :---: |
| BIS 370：Dimensions of Liberal Studies | 3 | 3 | 3 |  |
| BIS 470：Liberal Studies Seminar | 3 | 3 | 3 |  |

## V．Liberal Studies Humanities：（12 hours）${ }^{4}$

|  |  | 3 |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | 3 |  |  |
|  |  | 3 |  |  |
|  |  | 3 |  |  |

## VI．Liberal Studies Social Sciences（12 hours）${ }^{5}$

|  |  | 3 |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | 3 |  |  |
|  |  | 3 |  |  |
|  |  | 3 |  |  |

VII．Electives（as needed for 120 total hours）${ }^{6}$

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| :--- | :--- | :--- | :--- | :--- |
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${ }^{6}$ There is no specific elective or minor requirement for the BLS degree．Students are encouraged to pursue a minor in addition to the BLS requirements．Students are encouraged to use these electives to fulfill prerequisite course requirements or gain knowledge and skills in preparation for required upper－division required courses．

Upper division courses with the following prefixes will satisfy the Liberal Studies Humanities and Liberal Studies Social Sciences requirements, but this is not an exhaustive list. It represents qualifying prefixes for which ASU frequently offers online classes. Please consult with your Academic Success Specialist to determine whether other humanities and social science courses may also satisfy these major requirements.

## Liberal Studies Humanities

- Art History/Auxiliary (ARS, ARA)
- Asian Pacific American Studies (APA)
- English (ENG, ENH)
- Film and Media Studies (FMS)
- History (HST, HTY, HIS)
- Mass Communication (MCO, MCN)
- Philosophy (PHI, PHL)
- Religious Studies (REL)
- Theatre (THE, THR)
-Women's Studies (WSH)


## Liberal Studies Social Sciences

- Aging and Lifespan Development (ALD)
- Anthropology (ASB, ANT, ASM)
- Communication (COM, CMA, CMN)
- Criminal Justice (CRJ)
- Cultural Geography (GCU)
- Educational Psychology (EDP)
-Family Studies (FAS/CDE)
- Justice Studies (JUS)
- Parks and Recreation Management (PRM)
-Political Science (POL, POS, PLS)
- Psychology (PGS)
-Public Affairs (PAF)
- Public Policy and Government (PGV)
- Science, Technology, and Society (STS)
- Social and Behavioral Sciences (SBS)
- Social Justice and Human Rights (JHR)
- Social Work (SWU)
- Sociology (SOC, SCL)
- Transborder Chicana/o Latina/o Studies (TCL)
- Women's Studies (WST, WNS)


## 2011－2012 Major Map Science，Technology and Society，BS

School of Letters \＆Sciences
Campus：Polytechnic WU⿴囗十心
ECSTSBS


Term hours subtotal： 16

| Term 4 48－60 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Upper Division Track Focus Area Course |  | 3 | C | －Discuss required Minor for the degree with your Academic Advisor． |
| Humanities，Fine Arts and Design（HU） |  | 3 |  |  |
| Natural Science－Quantitative（SQ） |  | 4 |  |  |
| Minor Course |  | 3 | C |  |
|  | Term hours subtotal： | 13 |  |  |
| Term 5 61－75 Credit Hours |  | Hours | Minimum Grade | Notes |
| STS 301：Research in Science and Technology Studies（SB） |  | 3 | C |  |



- All track courses should be chosen in consultation with an STS advisor.

| Science, Tecnology and Governance Track | Global Technology and Development Track | General Science, Technology, and Society Track |
| :---: | :---: | :---: |
| POS 310: American National Government (SB) | STS 328: Science, Technology, and Culture (SB) | ENG 301: Writing for the Professions (L) |
| STS 318: Science, Technology, and Government (SB) | STS 329: Cultivating Technology in Newly Industrializing Countries (SB \& G) | SOC 360: Sociological Psychology (SB) |
| STS 325: Science, Technology, and Public Policy (SB) | STS 330: Information Technology and Globalization (SB \& G) | PHI 307: Philosophy of Law (HU) |
| STS 331: Ethical Issues in Science and Technology (SB) | STS 331: Ethical Issues in Science and Technology (SB) | PHI 333: Introduction to Symbolic Logic |
| STS 364: Science, Technology, and National Security (SB) | STS 332: Global Issues in Science and Technology (SB \& G) | POS 310: American National Government (SB) |
| STS 425: Law, Values, Science, and Technology (SB) | STS 364: Science, Technology, and National Security (SB) | POS 315: The Supreme Court (SB) POS 333: Interest Groups (SB) |
|  |  | POS 370: Law and Society (SB) |
|  |  | POS 471: Constitutional Law I (SB) |
|  |  | POS 472: Constitutional Law II (SB) |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

Hrs Resident Credit for

Computer/Statistics/Quantitative Applications (CS)

- Humanities, Fine Arts and Design (HU
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## Bachelor of Applied Science Degree

| Student Name | ID. Number |
| :---: | :---: |
| A.A.S. Degree | Date A.A.S. Degree Granted |
| A.A.S. Degree Granting Institution | ASU Catalog Year 2011-2012 |
| B.A.S. Academic Department Technical Communication | Advisor |
| Number of Upper Division Transfer Credits | Expected Graduation Date |
| Institution of Transfer Course Work (Upper Division Only) |  |

## General Studies Sequence (19 Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |
| Science - ASC 325 | 4 |  |  |  |
| Upper-division Literacy [L] | 3 |  |  |  |
| Upper-division Humanities [HU] and [H] [C] | 3 |  |  |  |
| Upper-division Social Science [SB] | 3 |  |  |  |
| General Studies [HU or SB] and [G] | 3 |  |  |  |
| Sub | 19 | Hrs. |  |  |

## B.A.S. Area Core (15 Hours)

| ASU |  |  |  |  |  |  | Transfer |  | Transfer From |  | Grade |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TWC 301 General Principles of Multimedia Writing | 3 |  |  |  |  |  |  |  |  |  |  |
| TWC 401 Principles of Technical Communication | 3 |  |  |  |  |  |  |  |  |  |  |
| TWC 347 Written Communication for Managers | 3 |  |  |  |  |  |  |  |  |  |  |
| STP 420 Introductory Applied Statistics | 3 |  |  |  |  |  |  |  |  |  |  |
| TWC 421 Principles of Writing with Technology | 3 |  |  |  |  |  |  |  |  |  |  |

Sub Total
15 Hrs


Total (120 Hours Minimum)

## Advisor Comments

$\qquad$
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$\qquad$
$\qquad$
$\qquad$
$\qquad$

Total Upper Division Hours $\qquad$

Total ASU Resident Hours $\qquad$

Student Signature

| Date |
| :---: |
| Date |


| Dean Signature |
| :--- |
| University Signature |


| Date |
| :---: |
| Date |

## 2011-2012 Major Map

## African \& African American Studies, BA

College of Liberal Arts and Sciences
Campus:Tempe
LAAFRBA

| Term 1 0-14 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| AFS 200: Introduction to African and African Diaspora Studies (SB \& G \& H) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Consult academic advisor for Learning Community, Academic Success Clusters and First Year Seminar options. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| LIA 194: Academic Success Seminar, Intro to Liberal Arts and Sciences | 1 |  |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Term hours subtotal: | 14 |  |  |


| Term 2 15-30 Credit Hours | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: |
| AFR OR AFS OR AFH Elective | 3 | C | - Selection of general studies courses will be determined by elective courses taken to fulfill the major. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-47 Credit Hours Critical course signified by | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| Concentration Course | 3 | C | - Selection of general studies courses will be determined by elective courses taken to fulfill the major. |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 4 48-61 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 AFH 305: The Global History of the Trans-Atlantic Slave Trade (SB \& H) | 3 | C | - Selection of general studies courses will be determined by elective courses taken to fulfill the major. |
| AFH 300: Precolonial Africa (SB \& G \& H) OR <br> AFS 301: Race and Racism in Africa/African Diaspora (SB \& G) OR <br> AFS 302: History of Black Women in America | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |


| Term 5 62-76 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| AFH 300: Precolonial Africa (SB \& G \& H) OR <br> AFS 301: Race and Racism in Africa/African Diaspora (SB \& G) OR <br> AFS 302: History of Black Women in America |  | 3 | C | - Selection of general studies courses will be determined by elective courses taken to fulfill the major. |
| AFR OR AFS OR AFH Upper Division Elective |  | 3 | C |  |
| Upper Division Concentration Course |  | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 77-91 Credit Hours |  | Hours | Minimum Grade | Notes |
| AFR OR AFS OR AFH Upper Division Elective |  | 3 | C |  |
| Upper Division Concentration Course |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Complete 2 courses: Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 92-106 Credit Hours |  | Hours | Minimum Grade | Notes |
| AFR OR AFS OR AFH Upper Division Elective |  | 3 | C |  |
| Concentration Course |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 107-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| AFR 498: Pro-Seminar |  | 3 | C |  |
| AFR OR AFS OR AFH Upper Division Elective |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Upper Division Concentration Course |  | 3 | C |  |
| Elective |  | 2 |  |  |
| 20, | Term hours subtotal: | 14 |  |  |


| Gender and Family Studies |  | The Americas |  |
| :--- | :--- | :--- | :--- |
|  | Politics and Society |  |  |


|  | AFH 394: Unruly Voices, Unruly Voices: Afr/Am Women | AFS 320: Africa: Politics, Environment, and Development |
| :---: | :---: | :---: |
|  | AFH 459: Studies in African American/Caribbean Literatures | AFS 327: Human Rights in Africa |
|  |  | AFS 340: The Making of Modern Africa (SB \& G \& H) |
|  | FH 465: Harlem Renaissance: a Cultural |  |
|  | History: | AFS 345: Peoples and Cultures of the Caribbean (SB \& G \& H) |
|  | 210. Introduction to African American |  |
|  | Studies (C) | AFS 355: Democracy and Civil Society in Africa |
|  | AFR 294: Zoot Suit-Hip Hop: African |  |
|  | American Po | AFS 394: Islam and Islamic Societies in Africa |
|  | s, Race and Society (SB \& H |  |
|  | \& C) | AFS 415: Black Political Thought and the Limits of Liberal Democracy (SB \& G \& H) |
|  | FR 335: Historical Studies in Race, Crime, |  |
|  | and the Law | AFS 325: Music as Political Discourse: Reggae, Calypso, and Hip Hop |
|  | AFR 375: Race, Gender and Sport (SB \& C) |  |
|  | AFR 394: Black Radicals: MLK, Mandela, | AFS 373: Islam and World Affairs |
|  | Malcolm X | AFR 394: Race, Ethnicity/Politics <br> AFR 394: Black Radicals: MLK, Mandela, Malcolm X |
|  | AFR 428: Critical Race Theory |  |
|  | AFR 429: African American Studies Theory and Methods |  |
|  | AFR 460: Race, Gender and Media (C) |  |
|  | AFS 202: Immigration and Ethnic Relations in the U.S. (SB \& H \& C) |  |
|  | AFS 210: Introduction to Ethnic Studies in the U.S. (C) |  |
|  | AFS 301: Race and Racism in Africa/African Diaspora (SB \& G) |  |
|  | AFS 302: History of Black Women in America |  |
|  | AFS 304: Islands of Globalization: Caribbean Politics and Political Economy (SB \& G \& H) |  |
|  | AFS 310: African/African American Psychology |  |
|  | AFS 312: Contemporary African and African Diaspora Women |  |
|  | AFS 345: Peoples and Cultures of the Caribbean (SB \& G \& H) |  |
|  | AFS 360: Black Families in the Diaspora: U.S. and Caribbean (SB \& C) |  |
|  | AFS 363: African American History to 1865 (SB \& H \& C) |  |
|  | AFS 364: African American History Since 1865 ((HU or SB) \& C \& H) |  |
|  | AFS 370: Family, Ethnic, and Cultural Diversity (SB \& C) |  |
|  | AFS 394: Blacks in Science, Medicine, and Public Health, Health Issues-African American Co, Popular Black Media/Adolescence, Race, Ethnicity, and Democracy, The Black Child in America, Women, Ethnicity/Equality Women Srch |  |
|  | AFS 415: Black Political Thought and the Limits of Liberal Democracy (SB \& G \& H) |  |
|  | AFS 494: Sports and Nationalism in the African Diaspora |  |
| Africa | Cultural Studies |  |
| AFH 202: Art of Africa, Oceania, and the Americas (HU \& H \& G) | AFH 202: Art of Africa, Oceania, and the Americas (HU \& H \& G) |  |
| AFH 300: Precolonial Africa (SB \& G \& H) | AFH 303: African and African American Art |  |
| AFH 303: African and African American Art | AFH 336: African Art (HU \& G) |  |


| AFH 318: African and African Diaspora <br> Women Writers (HU \& G) | AFH 465: Harlem Renaissance: a Cultural <br> History: 1877-1945 |
| :--- | :--- |
| AFH 335: Survey of African Literatures | AFR 294: Zoot Suit-Hip Hop: African <br> American Po |
| AFH 394: African Art | AFR 375: Race, Gender and Sport (SB \& C) |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. Â At least one of the two courses taken from the list must be upper division.A Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map American Indian Studies, BS

College of Liberal Arts and Sciences
Campus:Tempe
LAAISBS

| Term 1 0-14 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 1 AIS 180: Introduction to American Indian Studies (C) |  | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Natural Science - Quantitative (SQ) |  | 4 |  |  |
| Elective |  | 3 |  |  |
| LIA 194: Intro to Liberal Arts and Sciences |  | 1 |  |  |
|  | Term hours subtotal: | 14 |  |  |


| Term 2 15-29 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 AIS 280: American Indian Sovereignty and the Courts (H \& C) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 30-45 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| AIS Emphasis Area Course | 3 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Elective | 6 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 46-60 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 1 AIS 285: Federal Indian Policy (H \& C) | 3 | C | Complete all critical courses b |
| AIS Emphasis Area Course | 3 | C | end of semester 4 |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Elective | 3 |  |  |
| Lower Division CLAS Science and Society Elective | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 61-75 Credit Hours Critical course signified by ${ }^{\text {\% }}$ | Hours | Minimum Grade | Notes |
| 4 AIS 370: American Indian Languages and Cultures (C) | 3 | C |  |
| JUS 302: Basic Statistical Analysis in Justice Studies (CS) | 3 | C |  |
| Upper Division AIS Emphasis Area Course | 3 | C |  |



## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. A At least one of the two courses taken from the list must be upper division. A Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. At At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> Anthropology, BA

College of Liberal Arts and Sciences
Campus:Tempe
LAASBBA




## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.A A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. Â At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement.Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## 2011-2012 Major Map Anthropology, BS

College of Liberal Arts and Sciences
Campus:Tempe
LAASBBS

| Term 1 0-16 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ASB 102: Introduction to Cultural and Social Anthropology (SB \& G) OR <br> ASB 222: Buried Cities and Lost Tribes ((HU or SB) \& G \& H) OR <br> ASM 104: Bones, Stones, and Human Evolution (SB or SG) OR <br> AML 100: Introduction to Applied Mathematics for the Life and Social Sciences (MA) | 3-4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Field School Opportunities: (Archaeological, Physical or Ethnographic) can be used in place of on-campus courses. <br> - 2.0 cumulative GPA in critical courses recommended |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 170: Precalculus (MA) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| LIA 194: Intro to Liberal Arts and Sciences | 1 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 2 17-33 Credit Hours | Hours | Minimum Grade | Notes |
| ASB 102: Introduction to Cultural and Social Anthropology (SB \& G) OR <br> ASB 222: Buried Cities and Lost Tribes ( $(\mathrm{HU}$ or SB) \& G \& H) OR <br> ASM 104: Bones, Stones, and Human Evolution (SB or SG) OR <br> AML 100: Introduction to Applied Mathematics for the Life and Social Sciences (MA) | 4-3 | C | - 2.0 cumulative GPA in critical courses recommended |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 251: Calculus for Life Sciences (MA) | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 17-16 |  |  |
| Term 3 34-48 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| ASB 102: Introduction to Cultural and Social Anthropology (SB \& G) OR <br> ASB 222: Buried Cities and Lost Tribes ( $(\mathrm{HU}$ or SB) \& G \& H) OR <br> ASM 104: Bones, Stones, and Human Evolution (SB or SG) OR <br> AML 100: Introduction to Applied Mathematics for the Life and Social Sciences (MA) | 3-4 | C | - 2.0 cumulative GPA in critical courses recommended |
| CLAS Science and Society Elective | 3 | C |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Elective | 3 |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 4 49-63 Credit Hours | Hours | Minimum Grade | Notes |
| ASB 102: Introduction to Cultural and Social Anthropology (SB \& G) OR <br> ASB 222: Buried Cities and Lost Tribes ((HU or SB) \& G \& H) OR <br> ASM 104: Bones, Stones, and Human Evolution (SB or SG) OR <br> AML 100: Introduction to Applied Mathematics for the Life and Social Sciences (MA) | 3-4 | C | - 2.0 cumulative GPA in critical courses recommended |
| ASB OR ASM Elective | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |


| Upper Division Elective | 3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Elective | 3 |  |  |  |
|  | Term hours subtotal: | 15-16 |  |  |
| Term 5 64-78 Credit Hours |  | Hours | Minimum Grade | Notes |
| ASM 300: Anthropological Sciences Seminar |  | 3 | C |  |
| ASB OR ASM Upper Division Elective |  | 3 | C |  |
| Upper Division CLAS Science and Society Elective |  | 3 | C |  |
| Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours |  | Hours | Minimum Grade | Notes |
| ASM 465: Quantification and Analysis for Anthropologists (CS) OR BIO 415: Biometry (CS) OR <br> STP 4** Elective |  | 3-4 | C |  |
| ASM Upper Division Elective |  | 3 | C |  |
| ASB OR ASM Upper Division Elective |  | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
|  | Term hours subtotal: | 15-16 |  |  |
| Term 7 94-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| ASM Upper Division Elective |  | 3 | C |  |
| ASB OR ASM Upper Division Elective |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| ASM Upper Division Elective |  | 6 | C |  |
| Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 12 |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.A A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. $\hat{A}$ At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. A When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Applied Mathematics for Life and Social Sciences, BS

College of Liberal Arts and Sciences
Campus:Tempe
LAAMLBS

| Term 1 0-15 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 AML 100: Introduction to Applied Mathematics for the Life and Social Sciences (MA) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation <br> - Consult academic advisor for Academic Success Clusters, and First Year Seminar options |
| MAT 270: Calculus with Analytic Geometry I (MA) OR MAT 170: Precalculus (MA) | 4-3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| BIO 181: General Biology I (SQ) | 4 |  |  |
| LIA 194: Intro to Liberal Arts and Sciences | 1 |  |  |
| Term hours subtotal: | 15-14 |  |  |


| Term 2 16-32 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CSE 100: Principles of Programming with C++ (CS) OR CSE 110: Principles of Programming with Java (CS) | 3 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation <br> - Students should take SOC 101, ASB 102, PSY 101, POS 101 or any other intro Social Science course to be able to take upper-division electives in the Social Science track |
| MAT 271: Calculus with Analytic Geometry II (MA) OR MAT 270: Calculus with Analytic Geometry I (MA) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| BIO 182: General Biology II (SG) | 4 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| MAT 272: Calculus with Analytic Geometry III (MA) OR MAT 271: Calculus with Analytic Geometry II (MA) | 4 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation |
| CLAS Science and Society Elective | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) AND Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Elective | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4. Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 49-63 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 4 AML 253: Modeling in the Life and Social Science | 3 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation |
| MAT 272: Calculus with Analytic Geometry III (MA) OR MAT 274: Elementary Differential Equations (MA) OR MAT 275: Modern Differential Equations (MA) | 3-4 | C |  |


| Upper Division Life Sciences, Social Sciences and Applied Mathematics course | 3 | C | - Students MUST take at least 2 UD electives in each of the following tracks: Life Sciences, Social Sciences, and Applied Math (see advisor for course options) |
| :---: | :---: | :---: | :---: |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 5 64-78 Credit Hours | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| MAT 274: Elementary Differential Equations (MA) OR <br> MAT 275: Modern Differential Equations (MA) OR <br> MAT 342: Linear Algebra OR <br> MAT 343: Applied Linear Algebra | 3 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation <br> - Students MUST take at least 2 UD electives in each of the following tracks: Life Sciences, Social Sciences, and Applied Math (see advisor for course options) |
| Complete 2 courses: <br> Upper Division Life Sciences, Social Sciences and Applied Mathematics course | 6 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours | Hours | Minimum Grade | Notes |
| MAT 342: Linear Algebra OR MAT 343: Applied Linear Algebra OR Upper Division Elective | 3 | C |  |
| Complete 2 courses: <br> Upper Division Life Sciences, Social Sciences and Applied Mathematics course | 6 | C |  |
| Cultural Diversity in the U.S. (C) OR Global Awareness (G) OR Historical Awareness (H) OR Elective | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| Complete 2 courses: <br> Upper Division Life Sciences, Social Sciences and Applied Mathematics course | 6 | C |  |
| Upper Division CLAS Science and Society Elective | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| AML 406: Directed Reading and Research in Applied Mathematics for the Life and Social Sciences | 3 | C |  |
| Complete 3 courses: <br> Upper Division Life Sciences, Social Sciences and Applied Mathematics course | 9 | C |  |
| Term hours subtotal: | 12 |  |  |


| Life Sciences | Applied Mathematics | Social Sciences |
| :---: | :---: | :---: |
| BCH 361: Principles of Biochemistry | MAT 300: Mathematical Structures (L) | ASM 345: Disease and Human Evolution |
| BIO 320: Fundamentals of Ecology | MAT 343: Applied Linear Algebra | ASM 465: Quantification and Analysis for Anthropologists (CS) |
| BIO 321: Introductory Ecology Laboratory (L) | MAT 351: Mathematical Methods for Genetic Analysis (CS) | ECN 384: Economics of Social Behavior (SB) |
| BIO 406: Computer Applications in Biology (CS) | MAT 355: Introduction to Computational Molecular Biology | GCU 495: Quantitative Methods in Geography (CS) |
| BIO 410: Techniques in Wildlife Conservation Biology (L) | MAT 362: Advanced Mathematics for Engineers and Scientists | GCU 496: Geographic Research Methods (L) |
| BIO 411: Quantitative Conservation Biology | MAT 371: Advanced Calculus I | GPH 370: Geographic Information Technologies (CS) |
| BIO 415: Biometry (CS) | MAT 451: Mathematical Modeling (CS) |  |

BIO 417: Experimental Design
BIO 423: Population and Community Ecology

BIO 424: Dynamic Modeling in Social and
Ecological Systems
BIO 455: Introduction to Comparative
Genomics
BIO 456: Bioinformatics and Molecular
Evolution
BIO 469: Computational Neuroscience: Case Studies in Neuroethology

| GPH 371: Introduction to Cartography and Georepresentation (CS) |
| :---: |
| GPH 483: Geographic Information Analysis |
| JUS 301: Research in Justice Studies (SB) |
| JUS 302: Basic Statistical Analysis in Justice Studies (CS) |
| POS 301: Empirical Political Inquiry (SB) |
| POS 401: Political Statistics (CS) |
| POS 485: Political Economy (SB) |
| SOC 331: Environmental Sociology (SB \& G) |
| SOC 390: Social Statistics I (CS) |
| SOC 391: Research Methods (L or SB) |
| SOC 433: Applied Demography (SB) |
| SOC 448: Epidemics and Society (SB \& G) |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.A A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. A Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Asia Studies (East Asia), BA

College of Liberal Arts and Sciences
Campus:Tempe
LAHSTEABA

| Term 1 0-15 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| HST 106: Asian Civilizations ((HU or SB) \& G \& H) OR HST 107: Asian Civilizations (SB \& G \& H) OR Across Asian Course | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - The sequence of required and elective courses will vary with each student according to individual choices and the yearly schedule of classes. HST 496, the capstone course must be taken in the final year. <br> - Many general studies requirements can be met with courses taken to satisfy major requirements. Students should choose courses in consultation with the academic advisor in their major to ensure that all general studies requirements are met before graduation. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Chinese, Japanese or Korean language course at the intermediate level (202 or equivalent). | 5 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences | 1 |  |  |
| Term hours subtotal: | 15 |  |  |


| Term 2 16-30 Credit Hours Critical course signified by ! | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ARS 201: Art of Asia (HU \& H \& G) OR HST 201: Historical Themes in Asia OR Across Asia Course | 3 | C | - East Asia students must follow either a Chinese or Japanese track within the East Asia Major <br> - Many general studies requirements can be met with courses taken to satisfy major requirements. Students should choose courses in consultation with the academic advisor in their major to ensure that all general studies requirements are met before graduation. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Chinese, Japanese or Korean language course at the intermediate level (202 or equivalent). | 5 | C |  |
| Natural Science - Quantitative (SQ) OR Natural Science - General (SG) | 4 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 31 - 45 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| HST 111: Introduction to Asia OR HST 194: Introduction to Asia | 3 | C | - East Asia students must follow either a Chinese or Japanese track within the East Asia Major |
| 1 East Asia Elective course | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Chinese, Japanese or Korean language course at the intermediate level (202 or equivalent). | 5 | C | - Many general studies requirements can be met with courses taken to satisfy major |
| Lower Division Literacy and Critical Inquiry (L) | 3 |  | requirements. Students should |
| Elective | 1 |  | choose courses in consultation with the academic advisor in |
| Complete First-Year Composition requirement. Complete Mathematics (MA) requirement. |  |  | their major to ensure that all general studies requirements are met before graduation. |


| Term 4 46-60 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Upper Division East Asia Concentration course AND <br> Upper Division Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 | C |  |
| 4 Outside East Asia course | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Chinese, Japanese or Korean language course at the intermediate level <br> (202 or equivalent). | 5 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 61-75 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| Upper Division East Asia Concentration course AND <br> Upper Division Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 | C |  |
| Outside East Asia course | 3 | C |  |
| Upper Division East Asia Elective course | 3 | C |  |
| CSE 180: Computer Literacy (CS) OR Lower Division Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours | Hours | Minimum Grade | Notes |
| Upper Division East Asian Concentration Course AND Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 | C |  |
| Upper Division East Asia Elective course AND Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Complete 2 courses: Upper Division Elective | 6 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |
| Upper Division Outside East Asia course | 3 | C |  |
| Upper Division East Asian Concentration Course AND <br> Upper Division Humanities, Fine Arts and Design (HU) OR <br> Upper Division Social and Behavioral Sciences (SB) | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| HST 496: South, Southeast, and East Asia in the Global Matrix | 3 | C |  |
| Upper Division East Asia Concentration course AND Upper Division Humanities, Fine Arts and Design (HU) | 3 | C |  |
| Complete 2 courses: Upper Division Elective | 3 |  |  |
| Elective | 6 |  |  |
| Term hours subtotal: | 15 |  |  |


| Japanese Concentration Track | Across Asia Courses | Chinese Concentration Track |
| :---: | :---: | :---: |
| ARS 473: Art of Japan (HU) | ARS 201: Art of Asia (HU \& H \& G) | ARS 472: Art of China (HU) |
| FLA 421: Japanese Literature in Translation ((L or HU$) \& \mathrm{G})$ | GCU 326: Geography of Asia (SB \& G) | ARS 475: Chinese Painting (HU) |
| FMS 394: History of Anime | HST 106: Asian Civilizations ((HU or SB) \& G \& H) | CHI 205: Chinese Calligraphy |
|  |  | CHI 321: Chinese Literature (HU) |


| HST 108: Introduction to Japan (SB \& G \& H) |
| :---: |
| HST 387: Japan ((L or SB) \& H) |
| HST 388: Japan (SB \& G \& H) |
| HST 389: Japan Society and Values/Premod |
| HST 455: The United States and Japan (SB \& G \& H) |
| JPN 206: Japanese Calligraphy |
| JPN 321: Reading Modern Japanese Texts I ((L or HU) \& G) |
| JPN 414: Introduction to Classical Japanese |
| JPN 435: Readings in Modern Japanese Letters and Culture |
| JPN 485: Literary Translation: Theory and Practice |
| POS 451: China, Japan, and the Koreas (SB \& G) |
| REL 344: Religion and Values in Japanese Life (HU \& G) |
| REL 355: Japanese Cities and Cultures to 1800 (HU \& H) |
| REL 444: Religion in Japan (HU \& H \& G) |
| REL 494: Hiroshima: History and Memory |

POS 468: Comparative Asian foreign Policies
(SB \& G)
REL 294: Introduction to South Asia,
Southeast Asia Global Crossroads
REL 350: Hinduism ((L or HU) \& G)
REL 356: Buddhism in America
REL 357: Theravada Buddhism in South and
Southeast Asia (L \& G)
REL 365: Islamic Civilization (HU \& H)
REL 394: Religions of India, Women \&
Goddesses in India
SGS 394: Global Urban System,
Development, and Environment

## Notes:

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- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. $\hat{A}$ At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Asia Studies (South Asia), BA

College of Liberal Arts and Sciences
Campus:Tempe
LAHSTSABA

| Term 1 0-14 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| HST 106: Asian Civilizations ((HU or SB) \& G \& H) OR <br> HST 107: Asian Civilizations (SB \& G \& H) AND <br> Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - The sequence of required and elective courses will vary with each student according to individual choices and the yearly schedule of classes. HST 496, the capstone course must be taken in the final year. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Hindi language course(s) at the intermediate level (202 or equivalent). | 4 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences | 1 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-30 Credit Hours | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| ARS 201: Art of Asia (HU \& H \& G) OR HST 201: Historical Themes in Asia AND Historical Awareness (H) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Hindi language course(s) at the intermediate level (202 or equivalent). | 4 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-46 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| HST 111: Introduction to Asia OR REL 111: Introduction to Asia OR HST 194: Introduction to Asia | 3 | C |  |
| 4 South Asia Elective course | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Hindi language course(s) at the intermediate level (202 or equivalent). | 4 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Elective | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 47-60 Credit Hours | Hours | Minimum Grade | Notes |
| 4 South Asia Concentration course | 3 | C |  |
| 4. Outside South Asia course | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Hindi language course(s) at the intermediate level (202 or equivalent). | 4 | C |  |



| Outside South Asia |
| :---: |
| ARS 472: Art of China (HU) |
| ARS 473: Art of Japan (HU) |
| ARS 475: Chinese Painting (HU) |
| ARS 494: Buddhist Art Across Asia |
| ASB 325: Peoples of Southeast Asia (G) |
| CHI 205: Chinese Calligraphy |
| CHI 321: Chinese Literature (HU) |
| CHI 322: Chinese Literature (HU \& G) |
| CHI 345: Chinese Film and Civilization |
| CHI 413: Introduction to Literary Chinese I (HU) |
| CHI 414: Classical Chinese II |
| FLA 294: Introduction to Chinese Cinema, Southeast Asian Literatures in Translation |
| FLA 420: Mod Chinese Literature in Translation |
| FLA 421: Japanese Literature in Translation ((L or HU) \& G) |
| FLA 494: Chinese Fiction in Trnslatn |
| FMS 394: History of Anime |
| GCU 432: Geography of China (SB \& G) |
| GCU 433: Geography of Southeast Asia |
| HPS 325: History of Chinese Medicine (HU \& H \& G) |
| HST 108: Introduction to Japan (SB \& G \& H) |
| HST 240: Introduction to Southeast Asia ((HU or SB) \& G) |
| HST 383: China (SB \& H) |
| HST 384: China (SB \& G \& H) |
| HST 385: History of Chinese Medicine (HU \& H \& G) |
| HST 386: Interpreting China's Classics ((L or HU ) \& H) |
| HST 387: Japan ((L or SB) \& H) |
| HST 388: Japan (SB \& G \& H) |
| HST 389: Japan Society and Values/Premod |
| HST 391: Modern Southeast Asia (SB \& G \& H) |
| HST 451: Chinese Cultural History ((HU or SB) \& H) |
| HST 452: Chinese Cultural History (SB \& G \& H) |
| HST 453: The People's Republic of China (SB \& G \& H) |
| HST 455: The United States and Japan (SB \& G \& H) |
| HST 456: The Vietnam War (SB \& G \& H) |
| JPN 206: Japanese Calligraphy |
| JPN 321: Reading Modern Japanese Texts I ((L or HU) \& G) |

JPN 414: Introduction to Classical Japanese
JPN 435: Readings in Modern Japanese
Letters and Culture
JPN 485: Literary Translation: Theory and
Practice
JUS 394: Information Technology and Social
Justice
KOR 250: Korean Culture and Society (HU
\& G)
KOR 347: Korean Film and Literature (HU)
KOR 350: Women of Korea (H)
MUP 387: Gamelan
REL 294: Southeast Asia Global Crossroads
REL 343: Daoism ((L or HU) \& G \& H)
REL 344: Religion and Values in Japanese
Life (HU \& G)
REL 346: Chinese Religions
REL 240: Introduction to Southeast Asia
((HU or SB) \& G)
ASB 240: Introduction to Southeast Asia
((HU or SB) \& G)
GCU 240: Introduction to Southeast Asia
((HU or SB) \& G)
POS 240: Introduction to Southeast Asia
((HU or SB) \& G)
SGS 240: Introduction to Southeast Asia
((HU or SB) \& G)

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. A Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.
- The Asia Studies major, South Asia Track, requires 20 credits or their equivalent in a South Asia Language (ordinarily Hindi) and 45 credits in content courses (of which at least 24 must be upper division credits, i.e., from courses numbered 300 or above). Many general studies requirements can be satisfied with course requirements in the major. Students should consult with their academic advisor often to ensure all requirements are met prior to graduation.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Asia Studies (Southeast Asia), BA

College of Liberal Arts and Sciences
Campus:Tempe
LAHSTSEABA

| Term 1-15 Credit Hours Critical course signified by | Hours | Minimum Grade |
| :---: | :---: | :---: |
| HST 106: Asian Civilizations (( HU or SB) \& G \& H) OR HST 107: Asian Civilizations (SB \& G \& H) OR Across Asia course AND Social and Behavioral Sciences (SB) | 3 | C |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |
| MAT 142: College Mathematics (MA) | 3 | C |
| Second Language: Requirement satisfied through the following: <br> * Completion of Vietnamese, Thai or Indonesian language course at the intermediate level (202 or equivalent). | 5 | C |
| LIA 194: Intro to Liberal Arts and Sciences OR First-Year Seminar | 1 |  |
| Term hours subtotal: | 15 |  |

- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics course
- ASU 101 or College specific equivalent First Year Seminar required of all freshman students.
- The sequence of required and elective courses will vary with each student according to individual choices and the yearly schedule of classes. HST 496, the capstone course must be taken in the final year.

| Term 2 16-30 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ARS 201: Art of Asia (HU \& H \& G) OR HST 201: Historical Themes in Asia OR Across Asia course AND Historical Awareness (H) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Vietnamese, Thai or Indonesian language course at the intermediate level (202 or equivalent). | 5 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by ${ }^{\text {e }}$ | Hours | Minimum Grade | Notes |
| HST 111: Introduction to Asia OR HST 194: Introduction to Asia | 3 | C |  |
| 4 Southeast Asia Elective course | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Vietnamese, Thai or Indonesian language course at the intermediate level <br> (202 or equivalent). | 5 | C |  |
| Elective | 1 |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 46-60 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |

HST 240: Introduction to Southeast Asia ((HU or SB) \& G) OR
REL 240: Introduction to Southeast Asia ((HU or SB) \& G) OR
(1. ASB 240: Introduction to Southeast Asia ((HU or SB) \& G) OR

GCU 240: Introduction to Southeast Asia ((HU or SB) \& G) OR
POS 240: Introduction to Southeast Asia ((HU or SB) \& G) OR
SGS 240: Introduction to Southeast Asia ((HU or SB) \& G)

| 4. Outside Southeast Asia course |  | 34 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| Natural Science - Quantitative (SQ) |  |  | 4 |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Vietnamese, Thai or Indonesian language course at the intermediate level <br> (202 or equivalent). |  | 5 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 5 61-75 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Southeast Asia Concentration course |  | 3 | C |  |
| Upper Division Southeast Asia Elective course |  | 3 | C |  |
| Outside Southeast Asia course |  | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) |  | 3 |  |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Term hours subtotal: |  | 15 |  |  |
| Term 6 76-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Southeast Asia Concentration course |  | 3 | C |  |
| Upper Division Southeast Asia Elective course |  | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Southeast Asia Concentration course |  | 3 | C |  |
| Upper Division Outside Southeast Asia course AND <br> Upper Division Humanities, Fine Arts and Design (HU) OR <br> Upper Division Social and Behavioral Sciences (SB) |  | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| HST 496: South, Southeast, and East Asia in the Global Matrix |  | 3 | C |  |
| Upper Division Southeast Asia Concentration course |  | 3 | C |  |
| Complete 3 courses: Upper Division Elective |  | 9 |  |  |
| Term hours subtotal: |  | 15 |  |  |
| Southeast Asia Concentration | Southeast Asia Elective Courses | Across | n Courses (6 |  |
| HST 240: Introduction to Southeast Asia ((HU or SB) \& G) | ARS 494: Buddhist Art Across Asia | GCU | Geography of |  |
| ASB 325: Peoples of Southeast Asia (G) | FLA 294: Southeast Asian Literatures in Translation | ARS 201: Art of Asia (HU \& H \& G) |  |  |
| HST 391: Modern Southeast Asia (SB \& G \& H) | GCU 433: Geography of Southeast Asia | HST 106: Asian Civilizations ((HU or SB) \& G \& H) |  |  |
|  | HST 456: The Vietnam War (SB \& G \& H) | HST 201: Historical Themes in Asia |  |  |
| POS 358: Southeast Asia (SB \& G) | JUS 394: Information Technology and Social Justice | HST 303: ASIA: Women in Asia |  |  |
| SGS 394: Global Urban System, Development, and Environment |  |  |  |  |
|  | MUP 387: Gamelan | HST 310: Film as History (HU) |  |  |
|  |  | POS 445: Asian Political Thought (SB \& G) |  |  |
|  | POS 368: Ethics and Human Rights REL 294: Southeast Asia Global Crossroads | POS 468: Comparative Asian foreign Policies (SB \& G) |  |  |
|  | REL 357: Theravada Buddhism in South and Southeast Asia (L \& G) | PUP 4 | ternational City |  |

REL 350: Hinduism ((L or HU) \& G)
REL 351: Buddhism ((L or HU) \& G)

| Outside Southeast Asia |
| :---: |
| ARS 394: Art of India and South Asia |
| ARS 494: Buddhist Art Across Asia, South Asian Film |
| ARS 472: Art of China (HU) |
| ARS 473: Art of Japan (HU) |
| ARS 475: Chinese Painting (HU) |
| CHI 205: Chinese Calligraphy |
| CHI 321: Chinese Literature (HU) |
| CHI 322: Chinese Literature (HU \& G) |
| CHI 345: Chinese Film and Civilization |
| CHI 413: Introduction to Literary Chinese I (HU) |
| CHI 414: Classical Chinese II |
| DAN 194: Dances of India |
| ECN 394: S Asia/World Econ |
| ECN 436: International Trade Theory (SB \& G) |
| FLA 294: Introduction to Chinese Cinema |
| FLA 420: Mod Chinese Literature in Translation |
| FLA 421: Japanese Literature in Translation ((L or HU$) \& \mathrm{G})$ |
| FLA 494: Chinese Fiction in Trnslatn |
| FMS 394: History of Anime |
| GCU 432: Geography of China (SB \& G) |
| GRA 494: India:Cultrl Com \& Soc Is |
| HPS 325: History of Chinese Medicine (HU \& H \& G) |
| HST 108: Introduction to Japan (SB \& G \& H) |
| HST 303: ASIA: Modern South Asia |
| POS 357: South Asia Politics (SB \& G) |
| HST 383: China (SB \& H) |
| HST 384: China (SB \& G \& H) |
| HST 385: History of Chinese Medicine (HU \& H \& G) |
| HST 386: Interpreting China's Classics ((L or HU ) \& H) |
| HST 387: Japan ((L or SB) \& H) |
| HST 388: Japan (SB \& G \& H) |
| HST 389: Japan Society and Values/Premod |
| HST 451: Chinese Cultural History ((HU or SB) \& H) |
| HST 452: Chinese Cultural History (SB \& G \& H) |
| HST 453: The People's Republic of China (SB \& G \& H) |



SGS 494: China and Globalization

## Notes:

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- The Asia Studies major, Southeast Asia Track, requires 20 credits or their equivalent in a Southeast Asian Language (ordinarily Vietnamese, Thai, or Indonesian) and 39 credits in content courses (of which at least 24 must be upper division credits, i.e., from courses numbered 300 or above). Many general studies requirements can be satisfied with course requirements in the major. Students should consult with their academic advisor often to ensure all requirements are met prior to graduation.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## 2011-2012 Major Map Asian Languages - Chinese, BA

College of Liberal Arts and Sciences
Campus:Tempe
LACHIBA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 1 CHI 101: First-Year Chinese I |  | 5 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Students interested in the Chinese Flagship sub-plan should meet with an academic advisor regarding requirements. |
| CHI 120: Introduction to Chinese Culture |  | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| MAT 142: College Mathematics (MA) |  | 3 | C |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |  |
| SLC 294: Language Exploration |  | 2 |  |  |
|  | Term hours subtotal: | 16 |  |  |


| Term 2 17-30 Credit Hours Critical course signified by 4 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. CHI 102: First-Year Chinese II | 5 | C | - Students interested in the Chinese Flagship sub-plan should meet with an academic advisor regarding requirements. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 1. CHI 201: Second-Year Chinese I (G) | 5 | C | - Students interested in the Chinese Flagship sub-plan should meet with an academic advisor regarding requirements. |
| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 46-60 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| 4 CHI 202: Second-Year Chinese II (G) | 5 | C | - Students interested in the Chinese Flagship sub-plan should meet with an academic advisor regarding requirements. |
| APA 200: Introduction to Asian Pacific American Studies ((HU or SB) \& C) OR Cultural Diversity in the U.S. (C) OR Elective | 3 |  |  |


| Term 5 61-74 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| CHI 301: Third-Year Chinese I (G) |  | 5 | C | - Minimum grade of " C " in all CHI, SLC and East-Asian Related Fields courses. <br> - Enroll in Study Abroad Program credits or listed courses. <br> - SLC 420 topic must pertain to Chinese literature |
| Upper Division China Related Humanities or Social Science Course |  | 3 | C |  |
| APA 200: Introduction to Asian Pacific American Studies ((HU or SB) \& C) OR Social and Behavioral Sciences (SB) OR Elective |  | 3 |  |  |
| CHI 321: Chinese Literature (HU) OR <br> CHI 322: Chinese Literature (HU \& G) |  | 3 | C |  |
| Term hours subtotal: |  | 14 |  |  |
| Term 6 75-91 Credit Hours |  | Hours | Minimum Grade | Notes |
| CHI 302: Third-Year Chinese II (G) |  | 5 | C | - Minimum grade of "C" in all CHI, SLC and East-Asian Related Fields courses. <br> - Enroll in Study Abroad Program credits or listed courses. <br> - SLC 420 topic must pertain to Chinese literature |
| Upper Division China Related Humanities or Social Science Course |  | 6 | C |  |
| Historical Awareness (H) |  | 3 |  |  |
| CHI 321: Chinese Literature (HU) OR <br> CHI 322: Chinese Literature (HU \& G) |  | 3 | C |  |
|  | Term hours subtotal: | 17 |  |  |
| Term 7 92-106 Credit Hours |  | Hours | Minimum Grade | Notes |
| CHI 307: Introduction to Literary Chinese I (HU) |  | 3 | C | - Minimum grade of "C" in all CHI, SLC and East-Asian Related Fields courses. <br> - Enroll in Study Abroad Program credits or listed courses. |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| CHI 380: The Chinese Language |  | 3 | C |  |
| Upper Division Chinese Language, Literature, and Linquistics Elective Courses |  | 6 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 107-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| CHI 308: HU (Classical Chinese II) |  | 3 | C | - Minimum grade of " C " in all CHI, SLC and East-Asian Related Fields courses. <br> - Enroll in Study Abroad Program credits or listed courses. |
| SLC 4** Elective OR <br> SLC 498: Capstone |  | 3 | C |  |
| Lower Division Elective |  | 5 |  |  |
| Upper Division Chinese Language, Literature, and Linquistics Elective Courses |  | 3 | C |  |
| Term hours subtotal: |  | 14 |  |  |
| China Related Humanities or Social Science Courses | Chinese Literature Courses | Chinese Language Courses |  |  |
|  | CHI 430: Readings in Chinese Religions | CHI 401: Fourth-Year Chinese I |  |  |
| ARS 201: Art of Asia (HU \& H \& G) |  | CHI 402: Fourth-Year Chinese II |  |  |
| ARS 472: Art of China (HU) | CHI 450: Classical Prose |  |  |  |  |
| ARS 475: Chinese Painting (HU) | CHI 461: Classical Vernacular Performance <br> Literature | CHI 407: Chinese for Professional Purposes I |  |  |
|  |  | CHI 408: Chinese for Professional Purposes II |  |  |
| HST 383: China (SB \& H) | CHI 462: Readings in Traditional Xiaoshuo |  |  |  |  |
| HST 384: China (SB \& G \& H) | CHI 470: Modern Chinese Literature and |  |  |  |
| HST 385: History of Chinese Medicine (HU \& H \& G) |  |  |  |  |
| HST 386: Interpreting China's Classics ((L or HU )\& H) |  |  |  |  |
| HST 452: Chinese Cultural History (SB \& G \& H) |  |  |  |  |
| REL 343: Daoism ((L or HU) \& G \& H) |  |  |  |  |
| REL 345: Asian Religious Traditions (HU \& G) |  |  |  |  |
| REL 346: Chinese Religions |  |  |  |  |
| REL 351: Buddhism ((L or HU) \& G) |  |  |  |  |
| Chinese Linguistics Courses |  |  |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. A Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.
- Degree offerings in the School of International Letters \& Cultures are flexible liberal arts majors. Students must bear in mind that the credits toward the major and minor can only be accumulated after completion of preparatory language courses. These preparatory courses are not major requirements and do not count toward the hours the student needs to complete degree requirements. Demonstrated proficiency at the intermediate level is required for enrollment in major requirement courses. Students are strongly encouraged to contact an academic advisor regarding clarifications on course applicability.
- Students majoring in Chinese will notice there is a Flagship track. The Chinese Language Flagship Program is an intensive Chinese language program for advanced level learners. While there are common requirements between both tracks, there are also differences in the number of credit hours required in track-level courses. Students are strongly advised to see an academic advisor to discuss these differences. Regardless of which track the student chooses, s/he will graduate with a B.A. in Chinese. The track denotation will appear on the transcript.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Asian Languages - Japanese, BA

College of Liberal Arts and Sciences
Campus:Tempe
LAJPNBA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. JPN 101: First-Year Japanese I | 5 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| SLC 294: Language Exploration | 2 |  |  |
| Historical Awareness (H) | 3 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-30 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| 4 JPN 102: First-Year Japanese II | 5 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| 4. JPN 201: Second-Year Japanese I (G) | 5 | C |  |
| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |

Complete First-Year Composition requirement.
Complete Mathematics (MA) requirement.
Term hours subtotal: 15

| Term 4 46-60 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 JPN 202: Second-Year Japanese II (G) | 5 | C |  |
| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 61-75 Credit Hours | Hours | Minimum Grade | Notes |
| JPN 301: Third-Year Japanese I (G) | 3 | C | - Minimum grade of " C " in all JPN, SLC and East-Asian Related Fields courses. |
| JPN 3** Elective | 3 | C |  |
| SLC 421: Japanese Literature in Translation ((L or HU) \& G) | 3 | C |  |


| CHI OR KOR Elective OR <br> SLC 420: Chinese Fiction, Classic Novels of China, Trad Chinese Fict in Tran | 3 | C | - Enroll in Study Abroad Program credits or listed courses. |
| :---: | :---: | :---: | :---: |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| JPN 302: Third-Year Japanese II (G) | 3 | C | - Minimum grade of " C " in all JPN, SLC and East-Asian Related Fields courses. <br> - Enroll in Study Abroad Program credits or listed courses. |
| JPN 3** Elective | 3 | C |  |
| CHI OR KOR Elective OR <br> SLC 420: Chinese Fiction, Classic Novels of China, Trad Chinese Fict in Tran | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |
| JPN 401: Reading Modern Japanese Texts I ((L or HU) \& G) | 3 | C | - Minimum grade of "C" in all JPN, SLC and East-Asian Related Fields courses. <br> - Enroll in Study Abroad Program credits or listed courses. |
| JPN 414: Introduction to Classical Japanese | 3 | C |  |
| Japanese Related Area Elective | 3 | C |  |
| Upper Division Elective | 6 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| JPN 4** Elective | 3 | C | - Minimum grade of "C" in all JPN, SLC and East-Asian Related Fields courses. <br> - Enroll in Study Abroad Program credits or listed courses. |
| SLC 4** Elective OR <br> SLC 498: Capstone | 3 | C |  |
| Japanese Related Area Elective | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Elective | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of $C$ or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.A A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}$, SQ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. $\hat{A}$ At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement.Â Finally, a grade of $C$ or better must be earned in order for the course to be used to fill the science and society requirement.
- Degree offerings in the School of International Letters \& Cultures are flexible liberal arts majors. Students must bear in mind that the credits toward the major and minor can only be accumulated after completion of preparatory language courses. These preparatory courses are not major requirements and do not count toward the hours the student needs to complete degree requirements. Demonstrated proficiency at the intermediate level is required for enrollment in major requirement courses. Students are strongly encouraged to contact an academic advisor regarding clarifications on course applicability.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map

## Asian Pacific American Studies, BA

College of Liberal Arts and Sciences
Campus:Tempe
LAAPABA

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 APA 200: Introduction to Asian Pacific American Studies ((HU or SB) \& C) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| LIA 194: Academic Success Seminar, Intro to Liberal Arts and Sciences | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including <br> American Sign Language IV. | 4 | C |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-30 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - Selection of SB or HU courses will be determined by general studies designation selected for APA 200 and APA 360 |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) OR Social and Behavioral Sciences (SB) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-47 Credit Hours Critical course signified by 4 | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| APA Elective | 3 | C | - Selection of SB or HU courses will be determined by general studies designation selected for APA 200 and APA 360 |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Global Awareness (G) | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| 1. Complete First-Year Composition requirement. |  |  |  |

Term hours subtotal: 17

| Term 4 48-61 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 APA 360: Asian Pacific American Experience | 3 | C | - Selection of SB or HU courses will be determined by general studies designation selected for APA 200 and APA 360 |
| APA Upper Division Elective | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Term hours subtotal: | 14 |  |  |
| Term 5 62-76 Credit Hours | Hours | Minimum Grade | Notes |

 \& C)

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JUS 325: Globalization and Socio-Economic
Justice (G)
JUS 350: Immigration and Justice (SB & C)
JUS 405: Economic Justice ((L or SB) & G)
JUS 425: Race, Gender, and Justice ((L or
SB) & C)
JUS 432: Racial Justice (L)
POS 439: Minority Group Politics in America
(SB & C)
SBS 301: Cultural Diversity ((L or SB) & C)
SBS 339: Grassroots Social Movements (SB)
SBS 410: Topics in Identity/Difference
TCL 327: Health and Migration (SB)
TCL 410: Race, Medicine, and the Body (L)
WST 378: Global Feminist Theory (L & C &
G)
WST 380: Race, Gender and Class (SB & C)
WST 420: Women of Color in Film (HU &
C)
WST 457: Women, Cultures, and Societies
(SB & G)
```


## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.A A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. A At least one of the two courses taken from the list must be upper division.Â Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. A When you complete both courses, all three learning goals must be filled in order to complete the requirement. A Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> Biochemistry, BA

College of Liberal Arts and Sciences
Campus:Tempe
LABCHBA

| Term 1 0-14 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHM 117: General Chemistry for Majors I (SQ) AND CHM 111: General Chemistry Laboratory for Majors I OR CHM 113: General Chemistry I (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Consult an academic advisor for Learning Community, Campus Match and First Year Seminar options |
| 4 MAT 251: Calculus for Life Sciences (MA) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| LIA 194: Intro to Liberal Arts and Sciences OR CHM 191: Chemistry Topics | 1 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-29 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C |  |
| CHM 118: General Chemistry for Majors II (SQ) AND CHM 112: General Chemistry Laboratory for Majors II OR CHM 116: General Chemistry II (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 30-45 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| CHM 333: Organic Chemistry for Majors I OR CHM 233: General Organic Chemistry I | 3 | C | - Take PHY 111 and PHY 113 if $a$ two semester sequence of Physics is preferred. <br> - Take PHY 101 OR PHY 111 and 113; not both. |
| CHM 337: Organic Chemistry Laboratory for Majors I OR CHM 237: General Organic Chemistry Laboratory I | 1 | C |  |
| PHY 101: Introduction to Physics (SQ) OR PHY 111: General Physics (SQ) AND PHY 113: General Physics Laboratory (SQ) | 4 | C |  |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| 1. Complete First-Year Composition requirement. |  |  |  |
| Complete CHM 117, CHM 111, CHM 113, CHM 118, CHM 112 , CHM 116, MAT 251, PHY 101, PHY 111, PHY 113 course(s). |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 46-60 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) | 4-0 | C | - Take PHY 112 and PHY 114 if $a$ two semester sequence of Physics is preferred. PHY 112 and PHY 114 are critical by the end of term 4 if two semester |
| CHM 334: Organic Chemistry for Majors II OR CHM 234: General Organic Chemistry II | 3 | C |  |
| CHM 338: Organic Chemistry Laboratory for Majors II OR CHM 238: General Organic Chemistry Laboratory II | 1 | C |  |



## BIO elective

BIO 201: Human Anatomy and Physiology I
BIO 202: Human Anatomy and Physiology II (SG)

BIO 340: General Genetics

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. A At least one of the two courses taken from the list must be upper division. A Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> Biochemistry, BS

College of Liberal Arts and Sciences
Campus:Tempe
LABCHBS

| Term 1 0-15 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHM 111: General Chemistry Laboratory for Majors I AND CHM 117: General Chemistry for Majors I (SQ) OR CHM 113: General Chemistry I (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Consult an academic advisor for Learning Community, Campus Match and First Year Seminar options |
| 4 MAT 270: Calculus with Analytic Geometry I (MA) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| LIA 194: Intro to Liberal Arts and Sciences OR CHM 191: Chemistry Topics | 1 |  |  |
| Term hours subtotal: | 15 |  |  |


| Term 2 16-30 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C |  |
| CHM 112: General Chemistry Laboratory for Majors II AND CHM 118: General Chemistry for Majors II (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 271: Calculus with Analytic Geometry II (MA) | 4 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| CHM 333: Organic Chemistry for Majors I OR CHM 233: General Organic Chemistry I | 3 | C | - The following courses completed by end of term 3 : CHM 113 (or 117 and 111), CHM 116 (or 118 and 112), MAT 270, PHY 111 |
| CHM 337: Organic Chemistry Laboratory for Majors I OR CHM 237: General Organic Chemistry Laboratory I | 1 | C |  |
| 4 PHY 111: General Physics (SQ) | 3 | C |  |
| PHY 113: General Physics Laboratory (SQ) | 1 | C |  |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C |  |
| Elective | 3 |  |  |
| Complete CHM 113, CHM 117, CHM 111, CHM 116, CHM 118, CHM 112, MAT 270, PHY 111 course(s). |  |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 46-59 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 1. PHY 112: General Physics (SQ) | 3 | C |  |
| Complete CHM 233, CHM 237, BIO 181, BIO 182, PHY 112 course(s). |  |  |  |
| PHY 114: General Physics Laboratory (SQ) | 1 | C |  |
| CHM 334: Organic Chemistry for Majors II OR CHM 234: General Organic Chemistry II | 3 | C |  |


| CHM 338: Organic Chemistry Laboratory for Majors II OR CHM 238: General Organic Chemistry Laboratory II | 1 | C |  |
| :---: | :---: | :---: | :---: |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 5 60-74 Credit Hours | Hours | Minimum Grade | Notes |
| BCH 461: General Biochemistry | 3 | C | - CHM 234 and CHM 341 are coor pre-requisites for most advanced CHM and BCH courses |
| CHM 341: Elementary Physical Chemistry | 3 | C |  |
| Advanced BIO Elective | 3-4 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 6 75-89 Credit Hours | Hours | Minimum Grade | Notes |
| BCH 462: General Biochemistry | 3 | C |  |
| BCH 463: Biophysical Chemistry | 3 | C |  |
| BCH 467: Analytical Biochemistry Laboratory (L) | 3 | C |  |
| Advanced BIO Elective | 3-4 | C |  |
| Upper Division CLAS Science and Society Elective | 3 | C |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 7 90-107 Credit Hours | Hours | Minimum Grade | Notes |
| CHM OR BCH Upper Division Elective | 3 | C |  |
| Upper Division CLAS Science and Society Elective | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Complete 3 courses: Upper Division Elective | 9 |  |  |
| Term hours subtotal: | 18 |  |  |
| Term 8 108-120 Credit Hours | Hours | Minimum Grade | Notes |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  | - Elective vs. Upper Division Elective is dependant upon level of Organic Chemistry and Biology Electives <br> - Forty-five total units of upper division is required for degree completion |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Elective | 1 |  |  |
| Complete 2 courses: Upper Division Elective | 6 |  |  |
| Term hours subtotal: | 13 |  |  |
| BIO elective |  |  |  |
| BIO 201: Human Anatomy and Physiology I |  |  |  |
| BIO 202: Human Anatomy and Physiology II (SG) |  |  |  |
| BIO 340: General Genetics |  |  |  |
| BIO 351: Developmental Biology |  |  |  |
| BIO 353: Cell Biology |  |  |  |
| BIO 360: Animal Physiology |  |  |  |
| MBB 343: Genetic Engineering and Society (L) |  |  |  |
| MBB 350: Applied Genetics |  |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. A At least one of the two courses taken from the list must be upper division.A Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement.Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> Biochemistry (Medicinal Chemistry), BS

College of Liberal Arts and Sciences
Campus:Tempe
LABCHMBS

| Term 1 0-15 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHM 117: General Chemistry for Majors I (SQ) AND CHM 111: General Chemistry Laboratory for Majors I OR CHM 113: General Chemistry I (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Consult an academic advisor for Learning Community, Campus Match and First Year Seminar options |
| 4 MAT 270: Calculus with Analytic Geometry I (MA) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| LIA 194: Intro to Liberal Arts and Sciences OR CHM 191: Chemistry Topics | 1 |  |  |
| Term hours subtotal: | 15 |  |  |


| Term 2 16-30 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| :---: | :---: | :---: | :---: |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C |  |
| CHM 118: General Chemistry for Majors II (SQ) AND CHM 112: General Chemistry Laboratory for Majors II OR CHM 116: General Chemistry II (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 271: Calculus with Analytic Geometry II (MA) | 4 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| CHM 333: Organic Chemistry for Majors I OR CHM 233: General Organic Chemistry I | 3 | C | - Complete the following critical courses by end of term 3: CHM 117 and 111 (or 113), CHM 118 and 112 (or 116), MAT 270, PHY 111 |
| CHM 337: Organic Chemistry Laboratory for Majors I OR CHM 237: General Organic Chemistry Laboratory I | 1 | C |  |
| 4 PHY 111: General Physics (SQ) | 3 | C |  |
| PHY 113: General Physics Laboratory (SQ) | 1 | C |  |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C |  |
| Elective | 3 |  |  |
| Complete CHM 113, CHM 117, CHM 111, CHM 116 , CHM 118, CHM 112, MAT 270, PHY 111 course(s). |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 46-59 Credit Hours Critical course signified by ${ }^{\text {! }}$ | Hours | Minimum Grade | Notes |
| 1 PHY 112: General Physics (SQ) | 3 | C | - Complete remaining critical courses by end of term 4: CHM 333 (or 233), CHM 337 (or 237) BIO 181 or BIO 182, PHY 112 |
| PHY 114: General Physics Laboratory (SQ) | 1 | C |  |
| CHM 334: Organic Chemistry for Majors II OR CHM 234: General Organic Chemistry II | 3 | C |  |

course(s).
Term hours subtotal: 14

| Term 5 60-75 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| BCH 461: General Biochemistry | 3 | C | - CHM 234 and CHM 341 are coor pre-requisites for most advanced CHM and BCH courses |
| BIO 353: Cell Biology | 3 | C |  |
| CHM 341: Elementary Physical Chemistry | 3 | C |  |
| CHM 343: Physical Chemistry Laboratory | 1 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 76-90 Credit Hours | Hours | Minimum Grade | Notes |
| BCH 462: General Biochemistry | 3 | C |  |
| BCH 463: Biophysical Chemistry | 3 | C |  |
| BCH 467: Analytical Biochemistry Laboratory (L) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Upper Division CLAS Science and Society Elective | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |
| CHM 433: Advanced Organic Chemistry I | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Upper Division CLAS Science and Society Elective | 3 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| CHM 435: Medicinal Chemistry | 3 | C |  |
| CHM OR BCH Upper Division Elective | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Complete 2 courses: <br> Upper Division Elective | 6 |  |  |
| Term hours subtotal: | 15 |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. At At least one of the two courses taken from the list must be upper division. A Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. At At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Biological Sciences, BS

College of Liberal Arts and Sciences
Campus:Tempe
LABSCBS

| Term 1 $10-15$ Credit Hours Critical course signified by |  | Hours | Minimum <br> Grade |
| :--- | :--- | :--- | :--- |
| BIO 100: The Living World (SQ) OR <br> BIO 181: General Biology I (SQ) OR <br> BIO 182: General Biology II (SG) | 4 |  | N |


| Term 2 16-32 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C | - CHM 116 must be completed by end of term 3 |
| CHM 113: General Chemistry I (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 251: Calculus for Life Sciences (MA) OR MAT 170: Precalculus (MA) | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) OR <br> Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| 4 Complete CHM 113 course(s). |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 3 33-46 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C | - CHM 116 must be completed by end of term 3 |
| CHM 116: General Chemistry II (SQ) OR <br> CHM 231: Elementary Organic Chemistry (SQ) AND <br> CHM 235: Elementary Organic Chemistry Laboratory (SQ) OR <br> CHM 233: General Organic Chemistry I AND <br> CHM 237: General Organic Chemistry Laboratory I | 4 | C |  |
| MAT 251: Calculus for Life Sciences (MA) OR <br> Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 | C |  |
| CLAS Science and Society Elective OR BIO 340: Fundamentals of Genetics | 3-4 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| 4 Complete CHM 116 course(s). |  |  |  |
| Term hours subtotal: | 14-15 |  |  |
| Term 4 47-63 Credit Hours | Hours | Minimum Grade | Notes |



| BIO 321: Introductory Ecology Laboratory (L) | BIO 331: Animal Behavior |
| :---: | :---: |
|  | BIO 351: Developmental Biology |
| BIO 342: General Genetics Laboratory |  |
| BIO 343: Genetic Engineering and Society (L) | BIO 353: Cell Biology |
|  | BIO 360: Animal Physiology |
| BIO 352: Laboratory in Vertebrate Developmental Anatomy | BIO 370: Vertebrate Zoology |
| BIO 361: Animal Physiology Laboratory | MIC 220: Biology of Microorganisms |
| BIO 435: Research Techniques in Animal Behavior | PLB 300: Comparative Plant Diversity (L or SG) |
| MIC 302: Advanced Bacteriology Laboratory (L) |  |
| MBB 350: Applied Genetics |  |
| BIO 495: Undergraduate Research |  |

BIO 323: Conservation Biology and Ecological Sustainability II
BIO 325: Oceanography
BIO 346: The Darwinian Revolution
BIO 355: Introduction to Computational Molecular Biology (CS)

BIO 386: General Entomology
BIO 406: Computer Applications in Biology (CS)
BIO 415: Biometry (CS)
BIO 416: Professional Values in Science (L)
BIO 423: Population and Community Ecology

BIO 427: Fire (H)
BIO 428: Biogeography (L)
BIO 431: Genes, Development, and Evolution (L)

BIO 436: Sociobiology and Behavioral Ecology

BIO 440: Functional Genomics
BIO 446: Principles of Human Genetics (L)
BIO 453: Animal Histology
BIO 455: Introduction to Comparative Genomics

BIO 467: Neurobiology
BIO 461: Comparative Animal Physiology
BIO 462: Endocrine Physiology
BIO 464: Photobiology
BIO 471: Ornithology
BIO 472: Mammalogy
BIO 474: Herpetology
HPS 322: History of Science (HU \& H)
HPS 323: History of Science (HU \& H)
HPS 330: History of Biology: Conflicts and Controversies

HPS 331: History of Medicine (H)
MIC 360: Bacterial Physiology
MIC 420: Immunology: Molecular and Cellular Foundations

MIC 426: Medical Immunology
MIC 427: Immunoneuropsychology:
Research Foundation (L)
MIC 485: General Virology
PLB 302: Plants and Civilization
PLB 305: Cacti and Succulents
PLB 310: The Flora of Arizona
PLB 407: Plant Fossils and Evolution
PLB 411: Trees and Shrubs of Arizona
BIO 494: Advanced Animal Behavior, Advanced Study Practicum, Advanced Study Practicum: Anatomy \& Physiology,
Advanced Study Practicum: Laboratory
Assistance, Advanced Study Practicum:
Lecture

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. At At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement.Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Biological Sciences (Animal Physiology \& Behavior),BS

College of Liberal Arts and Sciences
Campus:Tempe
LABSCABS

| Term 1 0-15 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| BIO 100: The Living World (SQ) OR BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) |  | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - CHM 113 must be completed by end of term 2 <br> - If student tests into MAT 106 then BIO 100 is recommended |
| CHM 113: General Chemistry I (SQ) OR Social and Behavioral Sciences (SB) OR Humanities, Fine Arts and Design (HU) |  | 4-3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| STP 231: Statistics for Life Science (CS) |  | 3 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences |  | 1 |  |  |
|  | Term hours subtotal: | 15-14 |  |  |


| Term 2 16-32 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C | - CHM 116 must be completed by end of term 3 |
| CHM 113: General Chemistry I (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 251: Calculus for Life Sciences (MA) OR MAT 170: Precalculus (MA) | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) OR <br> Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| 4 Complete CHM 113 course(s). |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 3 33-46 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C | - CHM 116 must be completed by end of term 3 |
| CHM 116: General Chemistry II (SQ) OR <br> CHM 231: Elementary Organic Chemistry (SQ) AND <br> CHM 235: Elementary Organic Chemistry Laboratory (SQ) OR <br> CHM 233: General Organic Chemistry I AND <br> CHM 237: General Organic Chemistry Laboratory I | 4 | C |  |
| CLAS Science and Society Elective BIO 340: Fundamentals of Genetics | 3-4 | C |  |
| MAT 251: Calculus for Life Sciences (MA) OR <br> Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR <br> Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Complete Mathematics (MA) requirement. |  |  |  |
| 4 Complete CHM 116 course(s). |  |  |  |
| Term hours subtotal: | 14-15 |  |  |
| Term 4 47-62 Credit Hours | Hours | Minimum Grade | Notes |


| BIO 340: Fundamentals of Genetics OR BIO 345: Organic Evolution | 3-4 | C |  |
| :---: | :---: | :---: | :---: |
| BIO 331: Animal Behavior OR <br> BIO 360: Animal Physiology OR <br> BCH 361: Principles of Biochemistry | 3 | C |  |
| CHM 231: Elementary Organic Chemistry (SQ) AND <br> CHM 235: Elementary Organic Chemistry Laboratory (SQ) OR <br> CHM 233: General Organic Chemistry I AND <br> CHM 237: General Organic Chemistry Laboratory I OR <br> CHM 234: General Organic Chemistry II AND <br> CHM 238: General Organic Chemistry Laboratory II | 4 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 5 63-77 Credit Hours | Hours | Minimum Grade | Notes |
| BIO 345: Organic Evolution OR Upper Division Elective | 3-4 | C |  |
| PHY 101: Introduction to Physics (SQ) OR <br> PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) | 4 | C |  |
| BIO 331: Animal Behavior OR <br> BIO 360: Animal Physiology OR <br> BCH 361: Principles of Biochemistry | 3 | C |  |
| Major Laboratory/ Research Course | 2-4 | C |  |
| Social and Behavioral Sciences (SB) OR <br> Humanities, Fine Arts and Design (HU) OR <br> CHM 234: General Organic Chemistry II AND <br> CHM 238: General Organic Chemistry Laboratory II | 3-4 | C |  |
| Term hours subtotal: | 15-19 |  |  |
| Term 6 78-93 Credit Hours | Hours | Minimum Grade | Notes |
| BIO 331: Animal Behavior OR <br> BIO 360: Animal Physiology OR <br> BCH 361: Principles of Biochemistry | 3 | C |  |
| BIO 436: Sociobiology and Behavioral Ecology OR <br> BIO 461: Comparative Animal Physiology OR <br> BIO 462: Endocrine Physiology OR <br> BIO 467: Neurobiology OR <br> MIC 420: Immunology: Molecular and Cellular Foundations | 3 | C |  |
| PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) | 4 | C |  |
| Upper Division Elective <br> Upper Division CLAS Science and Society Elective | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 7 94-108 Credit Hours | Hours | Minimum Grade | Notes |
| BIO 351: Developmental Biology OR <br> BIO 370: Vertebrate Zoology OR <br> BIO 385: Comparative Invertebrate Zoology OR <br> BIO 453: Animal Histology OR <br> PSY 426: Neuroanatomy | 3-4 | C |  |
| BIO 436: Sociobiology and Behavioral Ecology OR <br> BIO 461: Comparative Animal Physiology OR <br> BIO 462: Endocrine Physiology OR <br> BIO 467: Neurobiology OR <br> MIC 420: Immunology: Molecular and Cellular Foundations | 3 | C |  |
| Upper Division CLAS Science and Society Elective | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| Upper Division Major General Elective Course | 3-4 | C |  |
| Upper Division Major General Elective Course OR Upper Division Elective | 3-4 | C |  |

Upper Division Humanities, Fine Arts and Design (HU)

| Upper Division Elective |  | $3-6$ |
| :---: | :---: | :---: |
|  | Term hours subtotal: | $12-17$ |


| Major Laboratory/Research Courses | Major General Electives Courses |
| :---: | :---: |
| BCH 367: Elementary Biochemistry <br> Laboratory | BIO 312: Bioethics (HU) |
| BIO 342: General Genetics Laboratory | BIO 320: Fundamentals of Ecology |
|  | BIO 353: Cell Biology |
| BIO 352: Laboratory in Vertebrate Developmental Anatomy | BIO 440: Functional Genomics |
| BIO 451: Cell Biotechnology Laboratory | MBB 440: Functional Genomics |
| BIO 453: Animal Histology | BIO 415: Biometry (CS) |
| MBB 343: Genetic Engineering and Society (L) | BIO 386: General Entomology |
| MBB 350: Applied Genetics | BIO 471: Ornithology |
| PLB 350: Applied Genetics | BIO 472: Mammalogy |
| MIC 220: Biology of MicroorganismsAND MIC 206: Microbiology Laboratory (SG) | BIO 474: Herpetology |
|  | BIO 431: Genes, Development, and Evolution |
| MIC 302: Advanced Bacteriology Laboratory (L) | (L) |
|  | BIO 455: Introduction to Comparative Genomics |
| MIC 421: Experimental Immunology |  |
| PLB 308: Plant Physiology | BIO 465: Neurophysiology |
| BIO 495: Undergraduate Research | BIO 494: Advanced Animal Behavior |
| MIC 495: Undergraduate Research | PLB 440: Photobiology |
| MBB 495: Undergraduate Research | BIO 464: Photobiology |
| PLB 495: Undergraduate Research | PSY 470: Psychopharmacology |
| BIO 484: Internship | BIO 494: Advanced Study Practicum, Advanced Study Practicum: Laboratory |
| MIC 484: Internship | Assistance, Advanced Study Practicum: <br> Lecture |
| MBB 484: Internship |  |
| PLB 484: Internship |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
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Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## 2011-2012 Major Map Biological Sciences (Biology \& Society), BS

College of Liberal Arts and Sciences
Campus:Tempe
LABSCSBS

| Term 1 $10-15$ Credit Hours Critical course signified by |  | Hours | Minimum <br> Grade |
| :--- | :--- | :--- | :--- |
| BIO 100: The Living World (SQ) OR <br> BIO 181: General Biology I (SQ) OR <br> BIO 182: General Biology II (SG) | 4 |  | N |


| Term 2 16-32 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C | - CHM 116 must be completed by end of term 3 |
| CHM 113: General Chemistry I (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 170: Precalculus (MA) OR MAT 251: Calculus for Life Sciences (MA) | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| 4 Complete CHM 113 course(s). |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 3 33-47 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C |  |
| CHM 116: General Chemistry II (SQ) OR Lower Division Elective | 3-4 | C |  |
| CLAS Science and Society Elective OR BIO 340: Fundamentals of Genetics | 4-3 | C |  |
| MAT 251: Calculus for Life Sciences (MA) OR <br> Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR <br> Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 4 | C |  |
| 4 Complete CHM 116 course(s). |  |  |  |
| 4. Complete Mathematics (MA) requirement. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 48-62 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| BIO 340: Fundamentals of Genetics OR BIO 345: Organic Evolution | 3 | C |  |
| Upper Division Biology and Society Elective - Ethics Course | 3 | C |  |

Social and Behavioral Sciences (SB) AND Global Awareness (G) OR
Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR
Social and Behavioral Sciences (SB) AND Historical Awareness (H) OR
Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR
Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR
Humanities, Fine Arts and Design (HU) AND Historical Awareness (H)
Literacy and Critical Inquiry (L)

| Term 5 63-77 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| BIO 311: Biology and Society | 3 | C | - BIO 311 is only taught in the Fall semester |
| BIO 345: Organic Evolution OR Upper Division Elective | 3-4 | C |  |
| Upper Division Biology and Society Elective - Science in Contemporary Society | 3 | C |  |
| Upper Division Major Biological Sciences Elective | 3 | C |  |
| Social and Behavioral Sciences (SB) OR Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 6 78-91 Credit Hours | Hours | Minimum Grade | Notes |
| BIO 314: Research Colloquium in Biology and Society I (L) | 2 | C | - BIO 314 is only taught in the Spring semester |
| Upper Division Biology and Society Elective - History and Philosophy of Science | 3 | C |  |
| Upper Division Major Biological Sciences Elective | 3 | C |  |
| Upper Division Social and Behavioral Sciences (SB) OR Upper Division Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Elective OR CLAS Science and Society Elective | 3 | C |  |
| Term hours subtotal: | 14 |  |  |


| Term 7 92-106 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| BIO 495: Undergraduate Research |  | 3 | C |  |
| Upper Division Major Biological Sciences Elective |  | 3 | C |  |
| Upper Division Major Core Elective Courses |  | 3 | C |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 107-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| BIO 414: Research Colloquium in Biology and Society II (L) |  | 1 | C | - BIO 414 is only taught in the Spring semester |
| Complete 2 courses: Elective |  | 6 |  |  |
| Upper Division Elective |  | 7 |  |  |
|  | Term hours subtotal: | 14 |  |  |


| Biology and Society Elective: Science in <br> Contemporary Society Courses |  | Major Biological Sciences Elective Courses |
| :--- | :--- | :--- | :--- |


| BIO 412: Conservation in Practice | BIO 386: General Entomology | Or any additional Biology and Society Elective Course |
| :---: | :---: | :---: |
| BIO 427: Fire (H) | BIO 406: Computer Applications in Biology (CS) |  |
| BIO 494: Ecosystems Services: People \& Nature | BIO 415: Biometry (CS) |  |
| CHM 107: Chemistry and Society (SQ \& G) | BIO 428: Biogeography (L) |  |
| HON 394: History and Evolution of Food | BIO 431: Genes, Development, and Evolution (L) |  |
| HON 494: Genetics and the Law | BIO 436: Sociobiology and Behavioral Ecology |  |
| HON 494: Law, Science, and Technology |  |  |
| HON 494: Uncertainty and Decision Making | BIO 440: Functional Genomics |  |
| HPS 311: Origins, Evolution, and Creation | BIO 446: Principles of Human Genetics (L) |  |
| HPS 394: Science and Society | BIO 455: Introduction to Comparative Genomics |  |
| JMC 445: Science and Medical Writing | BIO 461: Comparative Animal Physiology |  |
| MIC 314: HIV/AIDS: Science, Behavior, and Society | BIO 462: Endocrine Physiology |  |
| MIC 427: Immunoneuropsychology: Research Foundation (L) | BIO 467: Neurobiology |  |
|  | BIO 471: Ornithology |  |
| PLB 302: Plants and Civilization | BIO 472: Mammalogy |  |
| PSY 427: Immunoneuropsychology: Research Foundation | MBB 247: Principles of Molecular and Cellular Biology II |  |
| WST 360: Women as Healers (SB \& G) | MBB 343: Genetic Engineering and Society (L) |  |
| WST 394: Women and International Health |  |  |
|  | MBB 355: Introduction to Computational Molecular Biology (CS) |  |
|  | MBB 440: Functional Genomics |  |
|  | MIC 220: Biology of Microorganisms |  |
|  | MIC 360: Bacterial Physiology |  |
|  | MIC 420: Immunology: Molecular and Cellular Foundations |  |
|  | PLB 300: Comparative Plant Diversity (L or SG) |  |
|  | PLB 306: Plant Anatomy |  |
|  | PLB 308: Plant Physiology |  |
|  | PLB 310: The Flora of Arizona |  |
|  | PLB 407: Plant Fossils and Evolution |  |
|  | PLB 432: Computer Applications in Biology (CS) |  |
|  | PLB 440: Photobiology |  |
|  | PLB 498: Sonoran Desert Field Botany |  |
| Biology and Society Elective: History and Philosopy of Science Courses | Biology and Society Elective: Ethics Courses |  |
| BIO 316: History of Biology: Conflicts and Controversies (H) | BIO 312: Bioethics (HU) |  |
|  | BIO 324: Environmental Ethics (HU) |  |
| BIO 318: History of Medicine (H) | BIO 416: Professional Values in Science (L) |  |
| BIO 344: Origins, Evolution, and Creation | HPS 410: Professional Values in Science (L) |  |
| BIO 394: Science and Society | PHI 310: Environmental Ethics (HU) |  |
| HPS 311: Origins, Evolution, and Creation | PHI 320: Bioethics (HU) |  |
| HPS 313: Probability, Evidence, and Decision |  |  |
| HPS 314: Philosophy of Science (HU) |  |  |
| HPS 322: History of Science (HU \& H) |  |  |
| HPS 323: History of Science (HU \& H) |  |  |

HPS 325: History of Chinese Medicine (HU
$\& H \& G)$
HPS 330: History of Biology: Conflicts and
Controversies
HPS 331: History of Medicine (H)
HPS 336: Exploration and Science (SB \& H)
HPS 394: Science and Society
HST 385: History of Chinese Medicine (HU
\& H \& )
MIC 428: Immunophilosophy
PHI 313: Probability, Evidence, and Decision
PHI 314: Philosophy of Science (HU)
PHI 428: Immunophilosophy

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
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Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Biological Sciences (Conservation Biology and Ecology),BS

College of Liberal Arts and Sciences
Campus:Tempe
LABSCCBS

| Term 1 0-15 Credit Hours Critical course signified by 9. |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| BIO 100: The Living World (SQ) OR BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) |  | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - CHM 113 must be completed by end of term 2 <br> - If student tests into MAT 106 then BIO 100 is recommended |
| CHM 113: General Chemistry I (SQ) OR Social and Behavioral Sciences (SB) OR Humanities, Fine Arts and Design (HU) |  | 4-3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences |  | 1 |  |  |
| STP 231: Statistics for Life Science (CS) |  | 3 | C |  |
|  | Term hours subtotal: | 15-14 |  |  |


| Term 2 16-32 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C | - CHM 116 must be completed by end of term 3 |
| CHM 113: General Chemistry I (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 170: Precalculus (MA) OR MAT 251: Calculus for Life Sciences (MA) | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| 4 Complete CHM 113 course(s). |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 3 33-49 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C |  |
| CHM 116: General Chemistry II (SQ) OR <br> CHM 231: Elementary Organic Chemistry (SQ) AND <br> CHM 235: Elementary Organic Chemistry Laboratory (SQ) OR <br> CHM 233: General Organic Chemistry I AND <br> CHM 237: General Organic Chemistry Laboratory I | 4 | C |  |
| MAT 251: Calculus for Life Sciences (MA) OR <br> Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 | C |  |
| Social and Behavioral Sciences (SB) OR Humanities, Fine Arts and Design (HU) | 3 |  |  |
| CLAS Science and Society Elective OR BIO 340: Fundamentals of Genetics | 3-4 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| 4 Complete CHM 116 course(s). |  |  |  |
| Term hours subtotal: | 17-18 |  |  |
| Minimum |  |  |  |


| Term 4 50-62 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Grade | Notes |
| :---: | :---: | :---: | :---: |
| BIO 340: Fundamentals of Genetics OR BIO 345: Organic Evolution | 3-4 | C |  |
| CHM 231: Elementary Organic Chemistry (SQ) AND <br> CHM 235: Elementary Organic Chemistry Laboratory (SQ) OR <br> CHM 233: General Organic Chemistry I AND <br> CHM 237: General Organic Chemistry Laboratory I OR <br> CHM 234: General Organic Chemistry II AND <br> CHM 238: General Organic Chemistry Laboratory II | 4 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) OR <br> Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR <br> Social and Behavioral Sciences (SB) AND Historical Awareness (H) OR <br> Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR <br> Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR <br> Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 13-14 |  |  |
| Term 5 63-77 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> BIO 320: Fundamentals of Ecology OR <br> BIO 322: Conservation Biology and Ecological Sustainability I OR <br> BIO 323: Conservation Biology and Ecological Sustainability II OR <br> BIO 411: Quantitative Conservation Biology | 6 | C | - By end of term 5 two courses must be complete from BIO 320 , 322,323 , and 411. <br> - By end of term 6 BIO 320, 322, |
| BIO 345: Organic Evolution OR Upper Division Elective | 3 | C | 323 and 411 should be completed. |
| GPH 111: Introduction to Physical Geography (SQ) OR <br> GPH 370: Geographic Information Technologies (CS) OR <br> GLG 101: Introduction to Geology I (Physical) (SQ \& G) AND <br> GLG 103: Introduction to Geology I-Laboratory (SQ) OR <br> PHY 101: Introduction to Physics (SQ) OR <br> PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) OR <br> PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) | 3-4 | C |  |
| Elective OR <br> CHM 234: General Organic Chemistry II AND <br> CHM 238: General Organic Chemistry Laboratory II | 3-4 | C |  |
| Term hours subtotal: | 15-17 |  |  |
| Term 6 78-92 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> BIO 320: Fundamentals of Ecology OR <br> BIO 322: Conservation Biology and Ecological Sustainability I OR <br> BIO 323: Conservation Biology and Ecological Sustainability II OR <br> BIO 411: Quantitative Conservation Biology | 6 | C | - By end of term 6 BIO 320, 322, 323 and 411 should be completed. |
| BIO 412: Conservation in Practice OR <br> BIO 421: Landscape Ecology OR <br> BIO 423: Population and Community Ecology | 3 | C |  |
| Upper Division Social and Behavioral Sciences (SB) OR Upper Division Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 93-107 Credit Hours | Hours | Minimum Grade | Notes |
| BIO 370: Vertebrate Zoology OR <br> BIO 385: Comparative Invertebrate Zoology OR <br> PLB 300: Comparative Plant Diversity (L or SG) | 3 | C |  |
| BIO 420: Immunology: Molecular and Cellular Foundations OR <br> BIO 424: Dynamic Modeling in Social and Ecological Systems OR <br> BIO 426: Limnology (L) OR <br> BIO 427: Fire (H) OR <br> BIO 494: Soil Ecology OR <br> PLB 420: Plant Ecology: Organisms and Populations | 3-4 | C |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division CLAS Science and Society Elective | 3 | C |  |
| Upper Division Elective OR <br> CLAS Science and Society Elective | 3 | C |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 8 108-120 Credit Hours | Hours | Minimum Grade | Notes |


| Biodiversity, Field and Research Course |  | $2-4$ | C |
| :--- | :--- | :---: | :---: |
| Upper Division Elective |  | 8 |  |
|  | Term hours subtotal: | $13-16$ |  |


| Biodiversity, Field and Research Courses |
| :---: |
| ASM 443: Primatology |
| BIO 321: Introductory Ecology Laboratory (L) |
| BIO 325: Oceanography |
| BIO 370: Vertebrate Zoology |
| BIO 385: Comparative Invertebrate Zoology |
| BIO 386: General Entomology |
| BIO 410: Techniques in Wildlife Conservation Biology (L) |
| BIO 471: Ornithology |
| BIO 472: Mammalogy |
| BIO 484: Internship |
| BIO 495: Undergraduate Research |
| GPH 422: Plant Geography |
| MIC 220: Biology of Microorganisms |
| PLB 300: Comparative Plant Diversity (L or SG) |
| PLB 401: Mycology |
| PLB 407: Plant Fossils and Evolution |
| PLB 495: Undergraduate Research |
| PLB 498: Sonoran Desert Field Botany |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Biological Sciences (Genetics, Cell \& Developmental Biology), BS

College of Liberal Arts and Sciences
Campus:Tempe
LABSCGBS

| Term 1 0-15 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| BIO 100: The Living World (SQ) OR BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) |  | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - CHM 113 must be completed by end of term 2 <br> - If student tests into MAT 106 then BIO 100 is recommended |
| CHM 113: General Chemistry I (SQ) OR Social and Behavioral Sciences (SB) OR Humanities, Fine Arts and Design (HU) |  | 4-3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences |  | 1 |  |  |
| STP 231: Statistics for Life Science (CS) |  | 3 | C |  |
|  | Term hours subtotal: | 15-14 |  |  |


| Term 2 16-32 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C | - CHM 116 must be completed by end of term 3 |
| CHM 113: General Chemistry I (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 251: Calculus for Life Sciences (MA) OR MAT 170: Precalculus (MA) | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) OR <br> Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR <br> Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| 4 Complete CHM 113 course(s). |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 3 33-46 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C |  |
| CHM 116: General Chemistry II (SQ) OR <br> CHM 231: Elementary Organic Chemistry (SQ) AND <br> CHM 235: Elementary Organic Chemistry Laboratory (SQ) OR <br> CHM 233: General Organic Chemistry I AND <br> CHM 237: General Organic Chemistry Laboratory I | 4 | C |  |
| MAT 251: Calculus for Life Sciences (MA) OR <br> Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR <br> Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 | C |  |
| CLAS Science and Society Elective OR BIO 340: Fundamentals of Genetics | 3-4 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Complete Mathematics (MA) requirement. |  |  |  |
| 4 Complete CHM 116 course(s). |  |  |  |
| Term hours subtotal: | 14-15 |  |  |
| Term 4 47-63 Credit Hours | Hours | Minimum Grade | Notes |


| BIO 340: Fundamentals of Genetics OR BIO 345: Organic Evolution | 4-3 | C |  |
| :---: | :---: | :---: | :---: |
| BIO 360: Animal Physiology OR <br> BIO 446: Principles of Human Genetics (L) OR <br> MBB 247: Principles of Molecular and Cellular Biology II OR <br> MBB 440: Functional Genomics OR <br> MIC 420: Immunology: Molecular and Cellular Foundations | 3-4 | C |  |
| CHM 231: Elementary Organic Chemistry (SQ) AND <br> CHM 235: Elementary Organic Chemistry Laboratory (SQ) OR <br> CHM 233: General Organic Chemistry I AND <br> CHM 237: General Organic Chemistry Laboratory I OR <br> CHM 234: General Organic Chemistry II AND <br> CHM 238: General Organic Chemistry Laboratory II | 4 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 5 64-79 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> BIO 351: Developmental Biology OR <br> BIO 353: Cell Biology OR <br> BCH 361: Principles of Biochemistry | 6 | C | - Complete two courses from BIO 351, BIO 353, and BCH 361 |
| PHY 101: Introduction to Physics (SQ) OR <br> PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) | 4 | C |  |
| BIO 345: Organic Evolution OR Upper Division Elective | 3 | C |  |
| Social and Behavioral Sciences (SB) OR <br> Humanities, Fine Arts and Design (HU) OR <br> CHM 234: General Organic Chemistry II AND <br> CHM 238: General Organic Chemistry Laboratory II | 3-4 | C |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 6 80-93 Credit Hours | Hours | Minimum Grade | Notes |
| BIO 351: Developmental Biology OR BIO 353: Cell Biology OR BCH 361: Principles of Biochemistry | 3 | C | - Complete remaining course from BIO 351, BIO 353, and BCH |
| PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) | 4 | C | 361 |
| Upper Division Major Laboratory/Research Elective Course OR Lower Division Major Laboratory/Research Elective Course | 1-4 | C |  |
| Upper Division Social and Behavioral Sciences (SB) OR Upper Division Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Elective OR CLAS Science and Society Elective | 3 | C |  |
| Term hours subtotal: | 14-17 |  |  |
| Term 7 94-108 Credit Hours | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| Upper Division Major General Elective Course | 3 | C |  |
| Upper Division Major Laboratory/Research Elective Course | 3 | C |  |
| Upper Division CLAS Science and Society Elective | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| BIO 360: Animal Physiology OR <br> BIO 446: Principles of Human Genetics (L) OR <br> MBB 440: Functional Genomics OR <br> MIC 420: Immunology: Molecular and Cellular Foundations | 3 | C | - 4 hours of Laboratory/Research Elective Courses are required among at least two courses |
| Upper Division Major General Elective Course | 3 | C |  |
| Upper Division Elective | 6 |  |  |
| Term hours subtotal: | 12 |  |  |


| Major Laboratory Electives Courses | Major Genral Electives |
| :---: | :---: |
| BCH 367: Elementary Biochemistry <br> Laboratory | BIO 302: Cancer and Heart Disease (L) |
|  | BIO 312: Bioethics (HU) |
| BIO 342: General Genetics Laboratory | BIO 320: Fundamentals of Ecology |
| BIO 352: Laboratory in Vertebrate Developmental Anatomy | BIO 346: The Darwinian Revolution |
| BIO 451: Cell Biotechnology Laboratory | BIO 355: Introduction to Computational |
| BIO 453: Animal Histology | Molecular Biology (CS) |
| MBB 343: Genetic Engineering and Society (L) | MBB 355: Introduction to Computational Molecular Biology (CS) |
| MBB 350: Applied Genetics | BIO 406: Computer Applications in Biology (CS) |
| PLB 350: Applied Genetics | PLB 432: Computer Applications in Biology (CS) |
| MIC 206: Microbiology Laboratory (SG) |  |
| MIC 302: Advanced Bacteriology Laboratory (L) | BIO 415: Biometry (CS) |
|  | BIO 416: Professional Values in Science (L) |
| MIC 421: Experimental Immunology | BIO 431: Genes, Development, and Evolution |
| PLB 308: Plant Physiology | BIO 440: Functional Genomics |
| BIO 495: Undergraduate Research |  |
|  | MBB 440: Functional Genomics |
| MIC 495: Undergraduate Research | BIO 446: Principles of Human Genetics (L) |
| MBB 495: Undergraduate Research | BIO 455: Introduction to Comparative Genomics |
| PLB 495: Undergraduate Research |  |
|  | BIO 462: Endocrine Physiology |
|  | BIO 467: Neurobiology |
|  | HPS 322: History of Science (HU \& H) |
|  | HPS 323: History of Science (HU \& H) |
|  | HPS 330: History of Biology: Conflicts and Controversies |
|  | HPS 331: History of Medicine (H) AND MIC 360: Bacterial Physiology |
|  | MIC 426: Medical Immunology |
|  | MIC 427: Immunoneuropsychology: Research Foundation (L) |
|  | MIC 485: General Virology |
|  | BIO 464: Photobiology |
|  | PLB 440: Photobiology |
|  | BIO 494: Advanced Animal Behavior, Advanced Study Practicum, Advanced Study Practicum: Laboratory Assistance, Advanced Study Practicum: Lecture |
|  | MIC 220: Biology of Microorganisms |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. Â At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. A When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## 2011-2012 Major Map Chemistry, BA

College of Liberal Arts and Sciences
Campus:Tempe
LaCHMBA

| Term 1-15 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHM 111: General Chemistry Laboratory for Majors I AND CHM 117: General Chemistry for Majors I (SQ) OR CHM 113: General Chemistry I (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Consult an academic advisor for Learning Community, Academic Success Cluster and/or a First Year Seminar |
| 4 MAT 270: Calculus with Analytic Geometry I (MA) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| LIA 194: Intro to Liberal Arts and Sciences OR CHM 191: Chemistry Topics | 1 |  |  |
| Term hours subtotal: | 15 |  |  |


| Term 2 16-30 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHM 112: General Chemistry Laboratory for Majors II AND CHM 118: General Chemistry for Majors II (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 271: Calculus with Analytic Geometry II (MA) | 4 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 31-44 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| CHM 333: Organic Chemistry for Majors I OR CHM 233: General Organic Chemistry I | 3 | C | - Complete the following critical courses by end of term 3: CHM 117 and 111 (or 113), CHM 118 and 112 (or 116), MAT 270, PHY 111. |
| CHM 337: Organic Chemistry Laboratory for Majors I OR CHM 237: General Organic Chemistry Laboratory I | 1 | C |  |
| 4 PHY 111: General Physics (SQ) | 3 | C |  |
| PHY 113: General Physics Laboratory (SQ) | 1 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including <br> American Sign Language IV. | 4 | C |  |
| Elective | 2 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| (1. Complete CHM 117, CHM 111, CHM 113, CHM 118, CHM 112, CHM 116, MAT 270, PHY 111 course(s). |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 45-59 Credit Hours Critical course signified by ${ }^{\text {+ }}$ | Hours | Minimum Grade | Notes |


| PHY 112: General Physics (SQ) | 3 | C | - Complete remaining critical |
| :---: | :---: | :---: | :---: |
| PHY 114: General Physics Laboratory (SQ) | 1 | C | courses by end of term 4: CHM |
| CHM 334: Organic Chemistry for Majors II OR CHM 234: General Organic Chemistry II | 3 | C | 333 (or 233), CHM 337 (or 237) PHY 112. |


| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| :---: | :---: | :---: | :---: |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| 1. Complete CHM 333, CHM 233, CHM 337, CHM 237, PHY 112 course(s). |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 60-74 Credit Hours | Hours | Minimum Grade | Notes |
| CHM 325: Analytical Chemistry AND CHM 326: Analytical Chemistry Laboratory | 4 | C |  |
| CHM 341: Elementary Physical Chemistry | 3 | C |  |
| CHM 343: Physical Chemistry Laboratory | 1 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 75-90 Credit Hours | Hours | Minimum Grade | Notes |
| BCH OR CHM Upper Division Elective | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division Elective | 4 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |
| CHM 453: Inorganic Chemistry | 3 | C | - CHM 453 is only offered in the Fall semester. |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Complete 3 courses: Upper Division Elective | 9 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Complete 4 courses: Upper Division Elective | 12 |  |  |
| Term hours subtotal: | 15 |  |  |


#### Abstract

Notes: - All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement. - All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. At At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.


Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

2011-2012 Major Map Chemistry, BS<br>College of Liberal Arts and Sciences<br>Campus:Tempe<br>LACHMBS

| Term 1-15 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHM 111: General Chemistry Laboratory for Majors I AND CHM 117: General Chemistry for Majors I (SQ) OR CHM 113: General Chemistry I (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Consult an academic advisor for Learning Community, Academic Success Clusters and First Year Seminar options |
| 4 MAT 270: Calculus with Analytic Geometry I (MA) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| LIA 194: Intro to Liberal Arts and Sciences OR CHM 191: Chemistry Topics | 1 |  |  |
| Term hours subtotal: | 15 |  |  |


| Term 2 16-30 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHM 112: General Chemistry Laboratory for Majors II AND CHM 118: General Chemistry for Majors II (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C |  |
| 1 MAT 271: Calculus with Analytic Geometry II (MA) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| PHY 121: University Physics I: Mechanics (SQ) AND PHY 122: University Physics Laboratory I (SQ) | 4 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| CHM 333: Organic Chemistry for Majors I OR CHM 233: General Organic Chemistry I | 3 | C | - Completed the following critical courses by end of term 3: CHM 117 and 111 (or 113), CHM 118 and 112 (or 116), MAT 270, MAT 271 |
| CHM 337: Organic Chemistry Laboratory for Majors I OR CHM 237: General Organic Chemistry Laboratory I | 1 | C |  |
| MAT 272: Calculus with Analytic Geometry III (MA) | 4 | C |  |

PHY 132: University Physics Laboratory II (SQ)
Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR
Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR
Humanities, Fine Arts and (Hesign (HU) AND Historical Awareness (H)

Humanities, Fine Arts and Design (HU) AND Historical Awareness (H)
Complete First-Year Composition requirement.
Complete CHM 117, CHM 111, CHM 113, CHM 118, CHM 112, CHM 116, MAT 270, MAT 271 course(s).

Term hours subtotal:

| Term 4 46-61 Credit Hours Critical course signified by 4 . | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 CHM 240: Introduction to Physical Chemistry (CS) | 3 | C | - Complete remaining critical courses by end of term 4: CHM 333 (or 233), CHM 337 (or 237). CHM 240. <br> - AZ Community College students should consult with their advisor |
| CHM 334: Organic Chemistry for Majors II OR CHM 234: General Organic Chemistry II | 3 | C |  |
| CHM 338: Organic Chemistry Laboratory for Majors II OR CHM 238: General Organic Chemistry Laboratory II | 1 | C |  |

Elective
Complete CHM 333, CHM 233, CHM 337, CHM 237, CHM 240 course(s).
Term hours subtotal:

| Term 5 62-74 Credit Hours |  |
| :--- | :--- |
| CHM 325: Analytical Chemistry AND |  |
| CHM 326: Analytical Chemistry Laboratory |  |
| CHM 345: Physical Chemistry I |  |
| Humanities, Fine Arts and Design (HU) | Term hours subtotal: |
| Literacy and Critical Inquiry (L) |  |


| Term 6 75-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| CHM 327: Instrumental Analysis |  | 3 | C | - CHM 327, 328, 346, 348 and 349 are only offered in the Spring semester |
| CHM 328: Instrumental Analysis Laboratory |  | 2 | C |  |
| CHM 346: Physical Chemistry II |  | 3 | C |  |
| CHM 348: Physical Chemistry Laboratory I (L) AND CHM 349: Physical Chemistry Laboratory II (L) |  | 2 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| CHM 453: Inorganic Chemistry |  | 3 | C | - CHM 453 and 460 are only offered in the Fall semester |
| CHM 460: Biological Chemistry |  | 3 | C |  |
| Upper Division CLAS Science and Society Elective |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| CHM 452: Inorganic Chemistry Laboratory (L) |  | 1 | C | - CHM 452 is only offered in the Spring semester |
| CHM OR BCH Upper Division Elective |  | 3 | C |  |
| CLAS Science and Society Elective |  | 3 | C |  |
| Elective |  | 2 |  |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |

## Notes:

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- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. $\hat{A}$ At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. Â When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)
- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Chemistry (Environmental Chemistry), BS

College of Liberal Arts and Sciences
Campus:Tempe
LACHMEBS

| Term 1 0-15 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHM 111: General Chemistry Laboratory for Majors I AND CHM 117: General Chemistry for Majors I (SQ) OR CHM 113: General Chemistry I (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| 4 MAT 270: Calculus with Analytic Geometry I (MA) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| LIA 194: Intro to Liberal Arts and Sciences OR CHM 191: Chemistry Topics | 1 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 2 16-30 Credit Hours Critical course signified by ${ }^{\text {! }}$ | Hours | Minimum Grade | Notes |
| CHM 112: General Chemistry Laboratory for Majors II AND CHM 118: General Chemistry for Majors II (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C |  |
| 4 MAT 271: Calculus with Analytic Geometry II (MA) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| PHY 121: University Physics I: Mechanics (SQ) AND PHY 122: University Physics Laboratory I (SQ) | 4 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| CHM 333: Organic Chemistry for Majors I OR CHM 233: General Organic Chemistry I | 3 | C | - Complete the following critical courses by the end of term 3: CHM 117 and 111 (or 113), CHM 118 and 112 (OR 116), MAT 270, MAT 271 <br> - AZ Community College students should consult with their advisor for appropriate math course to meet CHM 345 pre-requisite requirement |
| CHM 337: Organic Chemistry Laboratory for Majors I OR CHM 237: Organic Chemistry Laboratory for Majors I | 1 | C |  |
| MAT 272: Calculus with Analytic Geometry III (MA) | 4 | C |  |
| PHY 131: University Physics II: Electricity and Magnetism (SQ) AND PHY 132: University Physics Laboratory II (SQ) | 4 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Complete CHM 117, CHM 111, CHM 113, CHM 118, CHM 112, CHM 116, MAT 270, MAT 271 course(s). |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 46-60 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Minimum Grade | Notes |
| 1 CHM 240: Introduction to Physical Chemistry (CS) | 3 | C | - Complete remaining critical courses by end of term 4: CHM 333 ( or 233), CHM 337 (or 237), CHM 240. |
| CHM 334: Organic Chemistry for Majors II OR CHM 234: Organic Chemistry for Majors II | 3 | C |  |
| CHM 338: Organic Chemistry Laboratory for Majors II OR CHM 238: Organic Chemistry Laboratory for Majors II | 1 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Elective | 5 |  |  |


| Term 5 61-76 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| CHM 302: Environmental Chemistry |  | 3 | C | - CHM 302, 325, 326, and 345 are only offered in the Fall semester. |
| CHM 325: Analytical Chemistry AND CHM 326: Analytical Chemistry Laboratory |  | 4 | C |  |
| CHM 345: Physical Chemistry I |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 6 77-89 Credit Hours |  | Hours | Minimum Grade | Notes |
| BCH 361: Principles of Biochemistry AND <br> BCH 367: Elementary Biochemistry Laboratory |  | 4 | C | - CHM 303, CHM 348, and GLG 321 are only offered in the Spring semester. |
| CHM 303: Environmental Chemistry Laboratory (L) |  | 2 | C |  |
| CHM 348: Physical Chemistry Laboratory I (L) |  | 1 | C |  |
| GLG 321: Mineralogy |  | 3 | C |  |
| Upper Division CLAS Science and Society Elective |  | 3 | C |  |
|  | Term hours subtotal: | 13 |  |  |
| Term 7 90-104 Credit Hours |  | Hours | Minimum Grade | Notes |
| CLAS Science and Society Elective |  | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Elective |  | 3 |  |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 105-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| CHM 481: Geochemistry |  | 3 | C | - CHM 481 is only offered in the Spring semester. |
| Elective |  | 3 |  |  |
| Complete 3 courses: Upper Division Elective |  | 10 |  |  |
|  | Term hours subtotal: | 16 |  |  |


#### Abstract

Notes: - All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement. - All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.


Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

- Computer/Statistics/Quantitative Applications
(CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Communication, BA

College of Liberal Arts and Sciences
Campus:Tempe
LACOMBA

Upper Division Elective 3

Minimum 2.50 GPA ASU Cumulative.
Term hours subtotal: 16

| Term 5 64-78 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| COM 308: Advanced Research Methods in Communication (L) | 3 | C | - Select COM and Related Area courses in conjunction with academic advisor |
| COM Upper Division Elective AND Social and Behavioral Sciences (SB) | 3 | C |  |
| Upper Division Related Area Course | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Elective | 3 |  |  |
|  | Term hours subtotal: 15 |  |  |
| Term 6 79-94 Credit Hours | Hours | Minimum Grade | Notes |
| COM 4** Elective | 3 | C | - Select COM and Related Area courses in conjunction with academic advisor |
| COM Upper Division Elective | 3 | C |  |
| Upper Division Related Area Course | 3 | C |  |


| Natural Science - Quantitative (SQ) OR | 4 |
| :--- | :---: |
| Natural Science - General (SG) | 3 |

Upper Division Elective 3

| Term 7 95-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| COM 407: Advanced Critical Methods in Communication |  | 3 | C | - Select COM and Related Area courses in conjunction with academic advisor |
| COM 4** Elective |  | 3 | C |  |
| Upper Division Related Area Course |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 2 |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| COM 4** Elective |  | 3 | C | - Select COM and Related Area courses in conjunction with academic advisor |
| Upper Division Elective |  | 3 |  |  |
| Complete 2 courses: Elective |  | 6 |  |  |
|  | Term hours subtotal: | 12 |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division.Â Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. $\hat{A}$ At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. Â When you complete both courses, all three learning goals must be filled in order to complete the requirement.Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)

| Cumulative GPA: 2.00 minimum | - Literacy and Critical Inquiry (L) | $\bullet$ Global Awareness (G) |
| :--- | :--- | :--- |
| Total hrs at ASU: 30 minimum | - Mathematical Studies (MA) | • Historical Awareness (H) |
| Hrs Resident Credit for | - Computer/Statistics/Quantitative Applications |  |
| Academic Recognition: 56 minimum | (CS) | First-Year Composition |
| Total Community College Hrs: 64 maximum | - Humanities, Fine Arts and Design (HU) |  |
|  | - Social and Behavioral Sciences (SB) |  |
|  | - Natural Science - Quantitative (SQ) |  |
|  | - Natural Science - General (SG) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Communication, BS

College of Liberal Arts and Sciences
Campus:Online, Tempe
LACOMBS

| Term 1 0-16 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Complete all critical courses by end of semester 4 <br> - Minimum ASU cumulative GPA of 2.50 recommended |
| Mathematics (MA) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| LIA 194: Intro to Liberal Arts and Sciences | 1 |  |  |
| Elective | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 2 17-32 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 COM 100: Introduction to Human Communication (SB) | 3 | C | - Complete all critical courses by end of semester 4 <br> - Minimum ASU cumulative GPA of 2.50 recommended |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Complete 2 courses: Elective | 6 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 COM 225: Public Speaking (L) | 3 | C | - Complete all critical courses by end of semester 4 <br> - Minimum ASU cumulative GPA of 2.50 required |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Complete 2 courses: Elective | 6 |  |  |
| 1. Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| 4. Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 49-63 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Minimum Grade | Notes |
| 4 COM 207: Introduction to Communication Inquiry | 3 | C | - Select COM and Related Area courses in conjunction with academic advisor <br> - Complete all critical courses by end of semester 4 <br> - Minimum ASU cumulative GPA of 2.50 required |
| COM Elective | 3 | C |  |
| CLAS Science and Society Elective | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Upper Division Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR <br> Upper Division Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |


| Term 5 64-78 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| COM 308: Advanced Research Methods in Communication (L) |  | 3 | C | - Select COM and Related Area courses in conjunction with academic advisor |
| COM Upper Division Elective AND <br> Upper Division Social and Behavioral Sciences (SB) |  | 3 | C |  |
| Upper Division CLAS Science and Society Elective |  | 3 | C |  |
| Upper Division Related Area Course |  | 3 | C |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours |  | Hours | Minimum Grade | Notes |
| COM 4** Elective |  | 3 | C | - Select COM and Related Area courses in conjunction with academic advisor |
| COM Upper Division Elective |  | 3 | C |  |
| Upper Division Related Area Course |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| COM 408: Advanced Critical Methods in Communication |  | 3 | C | - Select COM and Related Area courses in conjunction with academic advisor |
| COM 4** Elective |  | 3 | C |  |
| Upper Division Related Area Course |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| COM 4** Elective |  | 3 | C | - Select COM and Related Area courses in conjunction with academic advisor |
| Upper Division Elective |  | 3 |  |  |
| Complete 2 courses: Elective |  | 6 |  |  |
|  | Term hours subtotal: | 12 |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
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Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Computational Mathematical Sciences, BS

College of Liberal Arts and Sciences
Campus:Tempe
LACMSBS

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 MAT 270: Calculus with Analytic Geometry I (MA) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Minimum grade of C required in all MAT Classes; grade of B or better strongly correlated with timely graduation |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Cultural Diversity in the U.S. (C) OR Historical Awareness (H) | 3 |  |  |
| LIA 194: Intro to Liberal Arts and Sciences OR MAT 191: First-Year Seminar | 1 |  |  |
| Maintain 2.80 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 14 |  |  |




| CHM 116: General Chemistry II (SQ) | ECE 3** Elective | MAT 462: Applied Partial Differential Equations |
| :---: | :---: | :---: |
| CHM 117: General Chemistry for Majors I (SQ) | EEE Upper Division Elective |  |
|  | GLG 305: Dynamic Earth | MAT 475: Differential Equations |
| CHM 118: General Chemistry for Majors II (SQ) | GLG 321: Mineralogy | MAT 476: Partial Differential Equations |
| CHM 231: Elementary Organic Chemistry (SQ) | GLG 362: Geomorphology | STP 420: Introductory Applied Statistics (CS) |
|  | GLG 4** Elective | STP 421: Probability |
| CHM 235: Elementary Organic Chemistry <br> Laboratory (SQ) | IEE Upper Division Elective | STP 425: Stochastic Processes |
| GLG 101: Introduction to Geology I (Physical) (SQ \& G) | MAE Upper Division Elective | STP 427: Mathematical Statistics |
|  | MIC Upper Division Elective | STP 429: Experimental Statistics (CS) |
| GLG 102: Introduction to Geology II (Historical) (SG \& H) | MSE Upper Division Elective |  |
| GLG 103: Introduction to Geology <br> I-Laboratory (SQ) | PHI 413: Advanced Symbolic Logic |  |
| GLG 104: Introduction to Geology II-Laboratory (SG) | PHY Upper Division Elective |  |
|  | PLB Upper Division Elective |  |
| MIC 205: Microbiology (SG) |  |  |
| MIC 206: Microbiology Laboratory (SG) |  |  |
| MIC 220: Biology of Microorganisms |  |  |
| MBB 245: Principles of Molecular and Cellular Biology I (SQ) |  |  |
| PHY 121: University Physics I: Mechanics (SQ) |  |  |
| PHY 122: University Physics Laboratory I (SQ) |  |  |
| PHY 131: University Physics II: Electricity and Magnetism (SQ) |  |  |
| PHY 132: University Physics Laboratory II (SQ) |  |  |
| PHY 150: Physics I (SQ) |  |  |
| PHY 151: Physics II (SQ) |  |  |
| PLB 200: Biology of Plants (SQ) |  |  |
| PLB 201: Biology of Plants Laboratory (SQ) |  |  |

## Notes:

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- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. A Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. At At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. Â When you complete both courses, all three learning goals must be filled in order to complete the requirement.A Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Earth and Environmental Studies, BA

College of Liberal Arts and Sciences
Campus:Tempe
LAEESBA
$\left.\begin{array}{llll}\text { Term 1 } 10-14 \text { Credit Hours Critical course signified by }\end{array}\right)$

| Term 2 15-32 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| GLG 106: Habitable Worlds (SQ) OR <br> GLG 108: Water Planet OR <br> GLG 110: Geologic Disasters and the Environment (SG \& G) AND <br> GLG 111: Geologic Disasters Laboratory (SG) | 4 | C |  |
| 4 CHM/ BIO/ PHY Approved Courses | 4 | C |  |
| MAT 170: Precalculus (MA) OR <br> MAT 210: Brief Calculus (MA) OR <br> MAT 251: Calculus for Life Sciences (MA) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Term hours subtotal: | 18 |  |  |
| Term 3 33-47 Credit Hours Critical course signified by ${ }^{\text {\% }}$ | Hours | Minimum Grade | Notes |

GLG 106: Habitable Worlds (SQ) OR
GLG 108: Water Planet OR
GLG 110: Geologic Disasters and the Environment (SG \& G) AND
4 C
GLG 111: Geologic Disasters Laboratory (SG)
CHM/ BIO/ PHY Approved Courses $\quad 4$
Second Language: Requirement satisfied through the following:

* Completion of a language course at the intermediate level (202 or equivalent), including 4

American Sign Language IV.
Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR 3
Social and Behavioral Sciences (SB) AND Historical Awareness (H)
Complete First-Year Composition requirement.
Complete Mathematics (MA) requirement.
Term hours subtotal:
15

| Term 4 | $48-60$ Credit Hours | Hours | Minimum <br> Grade |
| :---: | :---: | :---: | :---: |
| GLG 305: Dynamic Earth | 3 | Notes |  |
| GLG 327: Earth's Critical Zone | 3 | C |  |

Second Language: Requirement satisfied through the following:

* Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV

| Elective | 3 |  |
| :---: | :---: | :---: |
|  | Term hours subtotal: | 13 |


| Term 5 61-75 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| GLG 325: Oceanography | 3 | C | - Must complete second language requirement by end of term 5 . For most languages, this is 202 or higher. There are some languages, however with a different numbering system. See your advisor for clarification. |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: GLG Upper Division Elective | 6 | C | - See SES advisor for GLG upper division course list |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> GLG Upper Division Elective | 6 | C | - See SES advisor for GLG upper division course list |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| GLG 464: Solving Environmental Problems | 3 | C | - See SES advisor for GLG upper division course list |
| GLG Upper Division Elective | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |

[^17]
## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
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Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## $1 \times$ Arizona State UNIVERSITY

## 2011-2012 Major Map Earth \& Space Exploration, BS

College of Liberal Arts and Sciences
Campus:Tempe
LASESBS

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 SES 100: Introduction to Exploration (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - LIA194 or College specific equivalent First Year Seminar required of all freshman students. |
| SES 101: Earth, Solar System, and Universe I (SQ) | 3 | C |  |
| SES 103: Earth, Solar System, and Universe Laboratory I | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 170: Precalculus (MA) OR Elective | 3 | C |  |
| LIA 194: Academic Success Seminar or First-Year Seminar | 1 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-28 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| 1. CHM 114: General Chemistry for Engineers (SQ) | 4 | C |  |
| 4 (1) MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| SES 102: Earth, Solar System, and Universe II | 3 | C |  |
| SES 104: Earth, Solar System, and Universe Laboratory II | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 29-44 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| PHY 121: University Physics I: Mechanics (SQ) AND PHY 122: University Physics Laboratory I (SQ) | 4 | C |  |
| 4. MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| SES 210: Engineering Systems and Experimental Design | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Elective | 3 |  |  |

Term hours subtotal:
16

| Term 4 45-60 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. MAT 267: Calculus for Engineers III (MA) | 3 | C |  |
| PHY 131: University Physics II: Electricity and Magnetism (SQ) AND PHY 132: University Physics Laboratory II (SQ) | 4 | C |  |
| Elective | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 61-75 Credit Hours | Hours | Minimum Grade | Notes |


| SES 310: Course not found | 3 | C |  |
| :---: | :---: | :---: | :---: |
| SES OR GLG OR AST Upper Division Elective | 3 | C |  |
| Upper Division SES Branch Course | 3 | C |  |
| Upper Division CLAS Science and Society Elective | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours | Hours | Minimum Grade | Notes |
| SES OR GLG OR AST Upper Division Elective | 3 | C |  |
| Upper Division SES Branch Course | 3 | C |  |
| MAT 275: Modern Differential Equations (MA) | 3 | C |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 91-106 Credit Hours | Hours | Minimum Grade | Notes |
| SES 410: Senior Exploration Project I | 3 | C |  |
| Upper Division SES Branch Course | 3 | C |  |
| GLG 400: Earth and Space Exploration Colloquium | 1 | C |  |
| Upper Division Elective | 3 |  |  |
| Complete 2 courses: Elective | 6 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 8 107-120 Credit Hours | Hours | Minimum Grade | Notes |
| SES 411: Senior Exploration Project II | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Complete 3 courses: Upper Division Elective | 8 |  |  |
| Term hours subtotal: | 14 |  |  |

## SES Branch Courses

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. Â At least one of the two courses taken from the list must be upper division. A Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## 4 UNIVERSITY

## 2011-2012 Major Map <br> Earth and Space Exploration (Astrobiology and Biogeosciences), BS

College of Liberal Arts and Sciences
Campus:Tempe
LASESABBS

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. SES 100: Introduction to Exploration (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - LIA194 or College specific equivalent First Year Seminar required of all freshman students. |
| SES 101: Earth, Solar System, and Universe I (SQ) AND SES 103: Earth, Solar System, and Universe Laboratory I | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 170: Precalculus (MA) OR Elective | 3 | C |  |
| LIA 194: Academic Success Seminar or First-Year Seminar | 1 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-31 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 4. CHM 113: General Chemistry I (SQ) | 4 | C |  |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| SES 102: Earth, Solar System, and Universe II AND SES 104: Earth, Solar System, and Universe Laboratory II | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 3 32-45 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| 1 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| BIO 181: General Biology I (SQ) | 4 | C |  |
| CHM 116: General Chemistry II (SQ) | 4 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |

Term hours subtotal: 14

| Term 4 46-58 Credit Hours |
| :--- |
| SES 311: Essentials of Astrobiology: Exploration for Life in the Universe |
| MAT 267: Calculus for Engineers III (MA) OR |
| MAT 275: Modern Differential Equations (MA) |
| BIO 182: General Biology II (SG) |
| GLG 321: Course not found |

Social and Behavioral Sciences (SB) AND Historical Awareness (H)

| Literacy and Critical Inquiry (L) | 3 |  |  |
| :---: | :---: | :---: | :---: |
| Upper Division SES Suggested Electives | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 75-90 Credit Hours | Hours | Minimum Grade | Notes |
| GLG 481: Geochemistry | 3 | C | - For a list of eligible Science and Society courses, visit the CLAS website: http://clas.asu.edu/scienceandsociety |
| PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 | C |  |
| PHY 132: University Physics Laboratory II (SQ) | 1 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Upper Division SES Suggested Electives | 3 | C |  |
| CLAS Science and Society Elective | 3 | C |  |
| Term hours subtotal: | 16 |  |  |
| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |
| SES 410: Senior Exploration Project I | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Upper Division Elective | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| SES 411: Senior Exploration Project II | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Complete 3 courses: Upper Division Elective | 9 |  |  |
| Term hours subtotal: | 15 |  |  |


| SES/GLG/AST Upper Division Elective |
| :--- |
|  |
| Mechanical Engr Design |
| GLG 404: Fundamentals of Planetary |
| Geology |
| GLG 430: Paleontology |
| GLG 435: Sedimentology |
| GLG 460: Astrobiology |
| GLG 461: Geomicrobiology |
| GLG 485: Meteorites and Cosmochemistry |
| GLG 490: Remote Sensing |
| GLG 490: Isotope Geochemistry |
| GLG 490: Field Geochemistry |
| AST 321: Introduction to Planetary and |
| Stellar Astrophysics (SQ) |
| BIO 320: Fundamentals of Ecology |
| BIO 345: Organic Evolution |
| BIO 340: General Genetics |
| In |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.A A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. A At least one of the two courses taken from the list must be upper division. A Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. At At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement.Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4) ARIZONA STATE UNIVERSITY

## 2011-2012 Major Map <br> Earth and Space Exploration (Astrophysics), <br> BS

College of Liberal Arts and Sciences
Campus:Tempe
LASESABS

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. MAT 265: Calculus for Engineers I (MA) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - LIA194 or College specific equivalent First Year Seminar required of all freshman students. |
| 4 SES 100: Introduction to Exploration (CS) | 3 | C |  |
| SES 101: Earth, Solar System, and Universe I (SQ) | 3 | C |  |
| SES 103: Earth, Solar System, and Universe Laboratory I | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| LIA 194: Academic Success Seminar | 1 |  |  |
|  | 14 |  |  |


| Term 2 15-31 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| 4 PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| 1 PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| SES 102: Earth, Solar System, and Universe II | 3 | C |  |
| SES 104: Earth, Solar System, and Universe Laboratory II | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 3 32-44 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 1. MAT 267: Calculus for Engineers III (MA) | 3 | C |  |
| 1 PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 | C |  |
| 1. PHY 132: University Physics Laboratory II (SQ) | 1 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Elective | 3 |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 4 45-59 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| 1 MAT 275: Modern Differential Equations (MA) | 3 | C | - For a list of eligible Science and Society courses, visit the CLAS website: http://clas.asu.edu/scienceandsociety |
| 4 PHY 241: University Physics III | 3 | C |  |
| PHY 201: Mathematical Methods in Physics I (CS) | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Elective | 3 | C |  |


| Term 5 60-75 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| PHY 314: Quantum Physics I | 3 | C |  |
| AST 321: Introduction to Planetary and Stellar Astrophysics (SQ) | 3 | C |  |
| GLG 400: Earth and Space Exploration Colloquium | 1 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 76-90 Credit Hours | Hours | Minimum Grade | Notes |
| AST 322: Introduction to Galactic and Extragalactic Astrophysics (SQ) | 3 | C | Recommended courses for SES upper division elective include: <br> - SES 310 Concepts of Elec and Mech Engr. Des (3) <br> - SES 311 Essentials of Astrobiology (3) <br> - GLG 404 Fundamentals of Planetary Science (3) <br> - SES/AST 490/598 Astr Instr \& Data Analysis (3) |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division Elective | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Upper Division SES Elective | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |
| AST 421: Astrophysics I | 3 | C |  |
| SES 410: Senior Exploration Project I | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Elective | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| SES 411: Senior Exploration Project II | 3 | C |  |
| AST 422: Astrophysics II | 3 | C |  |
| AST 494: Astrophysics Seminar | 1 | C |  |
| Upper Division Elective | 1 |  |  |
| Elective | 7 |  |  |
| Term hours subtotal: | 15 |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. At At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. Â When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

| Major GPA: 2.00 minimum | General Studies Core Requirements: | - Cultural Diversity in the U.S. (C) |
| :--- | :--- | :--- |
| Cumulative GPA: 2.00 minimum | - Literacy and Critical Inquiry (L) | - Global Awareness (G) |
| Total hrs at ASU: 30 minimum | - Mathematical Studies (MA) | • Historical Awareness (H) |
| Hrs Resident Credit for | - Computer/Statistics/Quantitative Applications |  |
| Academic Recognition: 56 minimum | (CS) |  |
| Total Community College Hrs: 64 maximum | - Humanities, Fine Arts and Design (HU) |  |
|  | - Social and Behavioral Sciences (SB) |  |
|  | - Natural Science - Quantitative (SQ) |  |
|  | - Natural Science - General (SG) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4) ARIZONA State UNIVERSITY

## 2011-2012 Major Map

## Earth and Space Exploration (Exploration Systems Design), BS

College of Liberal Arts and Sciences
Campus:Tempe
LASESESDBS

| Term 1 $0-14$ Credit Hours Critical course signified by | Hours | Minimum <br> Grade |
| :--- | :--- | :---: |
| MAT 265: Calculus for Engineers I (MA) | 3 | C |
| SES 100: Introduction to Exploration (CS) | 3 | C |
| SES 101: Earth, Solar System, and Universe I (SQ) | 3 | 1 |
| SES 103: Earth, Solar System, and Universe Laboratory I | 3 | C |
| ENG 101 or ENG 102: First-Year Composition OR |  | C |
| ENG 105: Advanced First-Year Composition OR <br> ENG 107 or ENG 108: English for Foreign Students | Term hours subtotal: | 14 |
| LIA 194: Academic Success Seminar |  | C |

- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics course
- LIA194 or College specific equivalent First Year Seminar required of all freshman students.

| Term 2 15-28 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| 4 CHM 114: General Chemistry for Engineers (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| SES 102: Earth, Solar System, and Universe II | 3 | C |  |
| SES 104: Earth, Solar System, and Universe Laboratory II | 1 | C |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 29-44 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 4. PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| 4 PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| MAT 267: Calculus for Engineers III (MA) | 3 | C |  |
| SES 210: Engineering Systems and Experimental Design | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Elective | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 45-60 Credit Hours Critical course signified by ${ }^{\text {! }}$ | Hours | Minimum Grade | Notes |


| MAT 275: Modern Differential Equations (MA) | 3 | C |
| :--- | :---: | :---: |
| PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 | C |
| PHY 132: University Physics Laboratory II (SQ) | 1 |  |
| SES 310: Course not found | 3 | C |
| CLAS Science and Society Elective | 3 | C |
| Literacy and Critical Inquiry (L) | Term hours subtotal: | 16 |

Term 5 61-76 Credit Hours

| SES 330: Practical Electronics and Instrumentation | 4 | C |  |
| :---: | :---: | :---: | :---: |
| SES OR GLG OR AST Upper Division Elective | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 77-91 Credit Hours | Hours | Minimum Grade | Notes |
| SES 405: Course not found | 3 | C |  |
| Upper Division CLAS Science and Society Elective | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Complete 2 courses: Elective | 6 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 92-106 Credit Hours | Hours | Minimum Grade | Notes |
| SES 410: Senior Exploration Project I | 3 | C |  |
| SES OR GLG OR AST Upper Division Elective | 6 | C |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 107-120 Credit Hours | Hours | Minimum Grade | Notes |
| SES 411: Senior Exploration Project II | 3 | C |  |
| Complete 3 courses: Upper Division Elective | 8 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 14 |  |  |

SES/GLG/AST Upper Division Elective
SES 394: Concepts of Electrical \&
Mechanical Engr Design
SES 498: Robtics for ESE
SES 498: Ast. Inst. and Data Analysis
AST 321: Introduction to Planetary and
Stellar Astrophysics (SQ)
AST 322: Introduction to Galactic and
Extragalactic Astrophysics (SQ)
SES 311: Essentials of Astrobiology:
Exploration for Life in the Universe
GLG 321: Mineralogy
GLG 424: Petrology
CEE 440: Hydrology
GLG 404: Fundamentals of Planetary
Geology

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. Â At least one of the two courses taken from the list must be upper division.Â Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec
to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum Cumulative GPA: 2.00 minimum Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 1 ARIZONA State UNIVERSITY

## 2011-2012 Major Map <br> Earth and Space Exploration (Geological Sciences), <br> BS

College of Liberal Arts and Sciences
Campus:Tempe
LASESGSBS

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{\text {\% }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: |
| MAT 170: Precalculus (MA) OR Elective | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| 1 SES 100: Introduction to Exploration (CS) | 3 | C |  |
| SES 101: Earth, Solar System, and Universe I (SQ) | 3 | C |  |
| SES 103: Earth, Solar System, and Universe Laboratory I | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences | 1 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-28 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 1. CHM 113: General Chemistry I (SQ) | 4 | C |  |
| 1 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| SES 102: Earth, Solar System, and Universe II | 3 | C |  |
| SES 104: Earth, Solar System, and Universe Laboratory II | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 29-44 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 1. MAT 266: Calculus for Engineers II (MA) | 3 | C | - GLG 101 pre-requisite for GLG$310$ |
| CHM 116: General Chemistry II (SQ) | 4 | C |  |
| GLG 310: Structural Geology | 3 | C |  |
| Elective | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Complete First-Year Composition requirement. |  |  |  |

Term hours subtotal: 16

| Term 4 45-57 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 PHY 121: University Physics I: Mechanics (SQ) | 3 | C |  |
| 4. PHY 122: University Physics Laboratory I (SQ) | 1 | C |  |
| GLG 321: Mineralogy | 3 | C |  |
| MAT 267: Calculus for Engineers III (MA) OR <br> MAT 274: Elementary Differential Equations (MA) OR <br> MAT 275: Modern Differential Equations (MA) | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 5 58-72 Credit Hours | Hours | Minimum Grade | Notes |
| GLG 400: Earth and Space Exploration Colloquium | 1 | C |  |
| PHY 131: University Physics II: Electricity and Magnetism (SQ) | 3 | C |  |



| Term 7 91-105 Credit Hours | Hours | Minimum <br> Grade |  |
| :--- | :--- | :--- | :--- |
| SES 410: Senior Exploration Project I | 3 | C |  |
| Upper Division SES/GLG Branch OR <br> SES OR GLG Upper Division Elective | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR <br> Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Upper Division Elective | Term hours subtotal: | 15 |  |
| Elective |  | 3 |  |
|  | Hours | Minimum <br> Grade |  |
| Term 8 106-120 Credit Hours |  | 3 |  |


| SES 411: Senior Exploration Project II OR | 3 | C |  |
| :--- | :--- | :---: | :--- |
| Upper Division Elective |  | 3 | C |
| Upper Division SES/GLG Branch OR <br> SES OR GLG Upper Division Elective | $5-8$ |  |  |
| Upper Division Elective |  | 3 |  |
| Literacy and Critical Inquiry (L) OR |  | 1 |  |
| Elective | Term hours subtotal: | $15-18$ |  |

- Students will only take SES 411:Senior Exploration Project II if they have not already taken GLG 452: Field Geology II. Do not take both.
- The Literacy Critical Inquiry is only required in term 8 if the student did not complete GLG 452.
- Students must complete 8 hours of Upper Division Elective if they do not take GLG 452.


## SES/GLG Branch Courses

GLG 418: Geophysics
GLG 424: Petrology
GLG 435: Sedimentology
GLG 430: Paleontology
GLG 470: Hydrogeology
GLG 481: Geochemistry
SES 310: Concepts of Electrical \&
Mechanical Engineering Design

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.A A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. $\hat{A}$ At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement.A Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Economics, BS

College of Liberal Arts and Sciences
Campus:Tempe
LAECNBS

| Term 1 $0-14$ Credit Hours | Hours | Minimum <br> Grade |
| :--- | :--- | :---: |
| Mathematics (MA) | $3-4$ | C |
| ENG 101 or ENG 102: First-Year Composition OR | 3 |  |
| ENG 105: Advanced First-Year Composition OR | C |  |
| ENG 107 or ENG 108: English for Foreign Students |  | 1 |
| LIA 194: Intro to Liberal Arts and Sciences |  | 4 |
| Natural Science - Quantitative (SQ) | Term hours subtotal: | $14-15$ |
| Humanities, Fine Arts and Design (HU) |  |  |

- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics course
- ASU 101 or College specific equivalent First Year Seminar required of all freshman students.

| Term 2-15-30 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) |  | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) |  | 4 |  |  |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Historical Awareness (H) |  | 3 |  |  |
|  | Term hours subtotal: | 16-17 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by ${ }^{\text {P }}$ |  | Hours | Minimum Grade | Notes |
| MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA) |  | 3-4 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Elective |  | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |  |
| Complete Mathematics (MA) requirement. |  |  |  |  |
|  | Term hours subtotal: | 15-16 |  |  |
| Term 4 46-60 Credit Hours Critical course signified by ${ }^{\text {4 }}$ |  | Hours | Minimum Grade | Notes |
| ECN 221: Business Statistics (CS) OR STP 226: Elements of Statistics (CS) |  | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) |  | 3 | C |  |
| Upper Division Related Area Course |  | 3 |  |  |
| CLAS Science and Society Elective |  | 3 | C |  |
| Global Awareness (G) |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 5 61-75 Credit Hours |  | Hours | Minimum Grade | Notes |
| ECN 312: Intermediate Microeconomic Theory (SB) |  | 3 | C |  |


MGT Upper Division Elective
MKT Upper Division Elective
PGS 304: Effective Thinking (L)
PHI Upper Division Elective
POS Upper Division Elective
PUP 412: History of the City ((L or HU )\&
H)
PUP 425: Urban Housing Analysis
QBA Elective
SCM Upper Division Elective
SOC 332: The Modern City (SB \& G)
SOC 333: Population (SB \& G)
SOC 341: Modern Social Problems (SB)
SOC 456: Political Sociology
STP Elective

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. A At least one of the two courses taken from the list must be upper division.A Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map English (Creative Writing), BA <br> College of Liberal Arts and Sciences <br> Campus:Tempe <br> LAENGCBA

| Term 1 0-14 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences | 1 |  |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-28 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - 3.25 GPA in English courses beyond first-year composition |
| Natural Science - Quantitative (SQ) | 4 |  | courses required |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Minimum 3.25 GPA in ENG and ENH. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 29-42 Credit Hours Critical course signified by ${ }^{\mathbf{4}}$ | Hours | Minimum Grade | Notes |
| ENG 287: Beginning Creative Writing Workshop in Poetry OR ENG 288: Beginning Creative Writing Workshop in Fiction | 3 | C | - 3.25 in English courses beyond first-year composition courses required |
| 4 ENG 200: Critical Reading and Writing About Literature (L or HU) | 3 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Minimum 3.25 GPA in ENG and ENH. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 43-58 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Minimum Grade | Notes |
| ENG 287: Beginning Creative Writing Workshop in Poetry OR ENG 288: Beginning Creative Writing Workshop in Fiction | 3 | C | - 3.25 GPA in English courses beyond first-year composition courses required |
| ENG 387: Intermediate Creative Writing Workshop in Poetry OR ENG 388: Intermediate Creative Writing Workshop in Fiction | 3 | C |  |
| ENG 241: Literatures of the United States to 1860 (HU) AND ENG 242: Literatures of the United States, 1860 to Present (HU) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Minimum 3.25 GPA in ENG and ENH. |  |  |  |
| Milestone: Completion of successful portfolio review |  |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 5 59-73 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 241: Literatures of the United States to 1860 (HU) AND <br> ENG 242: Literatures of the United States, 1860 to Present (HU) | 3 | C | - 3.25 GPA in English courses beyond first-year composition courses required |
| ENG OR ENH 3** Elective AND <br> Upper Division Humanities, Fine Arts and Design (HU) | 3 | C |  |
| Upper Division Elective | 6 |  |  |
| Elective | 3 |  |  |
| Minimum 3.25 GPA in ENG and ENH. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 74-88 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 487: Advanced Creative Writing Workshop in Poetry OR ENG 488: Advanced Creative Writing Workshop in Fiction | 3 | B | - 3.25 GPA in English courses beyond first-year composition courses required |
| ENG OR ENH 3** Elective AND <br> Literacy and Critical Inquiry (L) AND Cultural Diversity in the U.S. (C) | 3 | C |  |
| Upper Division Elective AND <br> Upper Division Global Awareness (G) | 3 |  |  |
| Elective | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Minimum 3.25 GPA in ENG and ENH. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 89-105 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 490: Literary Forms: Theory and Practice in Poetry OR ENG 491: Literary Forms: Theory and Practice in Fiction | 3 | B | - 3.25 GPA in English courses beyond first-year composition courses required |
| ENG OR ENH 4** Elective | 3 | C |  |
| ENG Upper Division Elective OR ENG 484: Internship OR ENG 492: Honors Directed Study | 3 | C |  |
| Upper Division Elective AND <br> Upper Division Historical Awareness (H) | 3 |  |  |
| Complete 2 courses: Elective | 5 |  |  |
| Minimum 3.25 GPA in ENG and ENH. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 498: Capstone Fiction, Pro-Seminar OR <br> ENG 498: Capstone Poetry, Pro-Seminar | 3 | B | - 3.25 GPA in English courses beyond first-year composition courses required |
| ENG Upper Division Elective OR ENG 493: Honors Thesis (L) | 3 | C |  |
| ENG OR ENH 4** Elective | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Elective | 3 |  |  |
| Minimum 3.25 GPA in ENG and ENH. |  |  |  |
| Term hours subtotal: | 15 |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.A A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. Â At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses.A When you complete both courses, all three learning goals must be filled in order to complete the requirement.A Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map English (Linguistics), BA

College of Liberal Arts and Sciences
Campus:Tempe
LAENGNBA

| Term 1 0-14 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV; <br> * The student must choose course(s) taught in a modern foreign language, which excludes Latin, ancient Greek or ancient Hebrew. A grade of C or better must be earned. <br> AND <br> Global Awareness (G) | 4 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences | 1 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-31 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - 2.0 in English courses beyond first-year composition courses |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV; <br> * The student must choose course(s) taught in a modern foreign language, which excludes Latin, ancient Greek or ancient Hebrew. A grade of C or better must be earned. <br> AND <br> Global Awareness (G) | 4 | C | required |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Minimum 2.00 GPA in ENG and ENH. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 3 32-48 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 1 ENG 200: Critical Reading and Writing About Literature (L or HU) | 3 | C | - 2.0 in English courses beyond first-year composition courses required |
| ENG 213: Introduction to the Study of Language OR <br> SLC 201: Introduction to Linguistics (HU or SB) AND <br> ENG 221: Survey of English Literature (HU) OR <br> ENG 222: Survey of English Literature (HU \& H) OR <br> ENG 241: Literatures of the United States to 1860 (HU) OR <br> ENG 242: Literatures of the United States, 1860 to Present (HU) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including <br> American Sign Language IV; <br> * The student must choose course(s) taught in a modern foreign language, which excludes Latin, ancient Greek or ancient Hebrew. A grade of C or better must be earned. <br> AND <br> Global Awareness (G) | 4 | C |  |
| Natural Science - Quantitative (SQ) AND Natural Science - General (SG) | 4 |  |  |
| Elective | 3 |  |  |
| Minimum 2.00 GPA in ENG and ENH. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 4 49-64 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |

ENG 213: Introduction to the Study of Language OR
SLC 201: Introduction to Linguistics (HU or SB) AND
ENG 221: Survey of English Literature (HU) OR

| ENG 222: Survey of English Literature (HU \& H) OR <br> ENG 241: Literatures of the United States to 1860 (HU) OR <br> ENG 242: Literatures of the United States, 1860 to Present (HU) | 3 | C | - 2.0 in English courses beyond first-year composition courses required |
| :---: | :---: | :---: | :---: |
| ENG 312: English in its Social Setting (L or HU or SB) OR ENG 314: Modern Grammar | 3 | C |  |
| Minimum 2.00 GPA in ENG and ENH. |  |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV; <br> * The student must choose course(s) taught in a modern foreign language, which excludes Latin, ancient Greek or ancient Hebrew. A grade of C or better must be earned. <br> AND <br> Global Awareness (G) | 4 | C |  |
| Complete 2 courses: Elective | 6 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 65-79 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| ENG 312: English in its Social Setting (L or HU or SB) OR ENG 314: Modern Grammar | 3 | C | - 2.0 in English courses beyond first-year composition courses required <br> - Course taken must be at the 400 level of a modern foreign language in which the class is taught in that language. See your advisor if you have questions. Due to prerequisite restrictions, you must also complete at least two courses at the 300 level or higher. |
| ENG 413: History of English Language (HU) | 3 | C |  |
| ENG OR ENH Upper Division Elective AND <br> Upper Division Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 | C |  |
| Minimum 2.00 GPA in ENG and ENH. |  |  |  |
| Upper Division Second Language: Requirement satisfied through the following: <br> * Completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country. | 3 | C+ |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 80-94 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 313: Phonology and Morphology | 3 | C | - 2.0 in English courses beyond first-year composition courses required <br> - Course taken must be at the 400 level of a modern foreign language in which the class is taught in that language. See your advisor if you have questions. Due to prerequisite restrictions, you must also complete at least two courses at the 300 level or higher. |
| ENG 414: Studies in Linguistics | 3 | C |  |
| ENG OR ENH Upper Division Elective | 3 | C |  |
| Minimum 2.00 GPA in ENG and ENH. |  |  |  |
| Upper Division Elective | 3 |  |  |
| Upper Division Second Language: Requirement satisfied through the following: <br> * Completion of upper division course(s) taught in a foreign language, taken in the United <br> States or the relevant country. | 3 | C+ |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 95-109 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 414: Studies in Linguistics | 3 | C | - 2.0 in English courses beyond first-year composition courses required <br> - Course taken must be at the 400 level of a modern foreign language in which the class is taught in that language. See your advisor if you have questions. Due to prerequisite restrictions, you must also complete at least two courses at the 300 level or higher. |
| Upper Division Elective OR <br> ENG 484: Internship OR <br> ENG 492: Honors Directed Study | 3 |  |  |
| Minimum 2.00 GPA in ENG and ENH. |  |  |  |
| Upper Division Elective | 3 |  |  |
| Upper Division Second Language: Requirement satisfied through the following: <br> * Completion of upper division course(s) taught in a foreign language, taken in the United <br> States or the relevant country. | 3 | C+ |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 110-120 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 414: Studies in Linguistics | 3 | C | - 2.0 in English courses beyond first-year composition courses required |
| ENG OR ENH Upper Division Elective OR ENG 493: Honors Thesis (L) | 3 | C |  |
| Minimum 2.00 GPA in ENG and ENH. |  |  |  |
| Upper Division Elective AND <br> Upper Division Historical Awareness (H) | 3 |  |  |
| Elective | 2 |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses.Â When you complete both courses, all three learning goals must be filled in order to complete the requirement. A Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map English (Literature), BA

College of Liberal Arts and Sciences
Campus:Tempe
LAENGTBA

| Term 1 0-14 Credit Hours | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences | 1 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-28 Credit Hours | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - 2.0 in English courses beyond first-year composition courses |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  | req |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Minimum 2.00 GPA in ENG and ENH. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 29-45 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 1. ENG 200: Critical Reading and Writing About Literature (L or HU) | 3 | C | - 2.0 in English courses beyond first-year composition courses required. |
| 2** ENG/ENH 200-level literature course AND Humanities, Fine Arts and Design (HU) | 3 | C |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Minimum 2.00 GPA in ENG and ENH. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 4 46-61 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| 4 Lower Division ENG/ENH course | 3 | C | - 2.0 in English courses beyond first-year composition courses required. |
| Lower Division ENG/ENH Elective course AND Lower Division Humanities, Fine Arts and Design (HU) | 3 | C |  |
| Lower Division ENG/ENH course | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Elective AND <br> Historical Awareness (H) | 3 |  |  |
| Minimum 2.00 GPA in ENG and ENH. |  |  |  |



## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. A Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec
to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum Cumulative GPA: 2.00 minimum Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Family \& Human Development, BS

College of Liberal Arts and Sciences
Campus:Online, Tempe
LAFASBS

| Term 1 0-13 Credit Hours Critical course signified by ${ }^{(1)}$ |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 4 CDE 232: Human Development (SB) |  | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Complete all critical courses by the end of semester 4 |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences |  | 1 |  |  |
| MAT 142: College Mathematics (MA) |  | 3 | C |  |
| SOC 101: Introductory Sociology (SB) OR Lower Division |  | 3 |  |  |
|  | Term hours subtotal: | 13 |  |  |
| Term 2 14-29 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| 4 FAS 101: Personal Growth in Human Relationships (SB) |  | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Natural Science - Quantitative (SQ) |  | 4 |  |  |
| Complete 2 courses: Elective |  | 6 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 3 30-45 Credit Hours Critical course signified by |  | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |

\(\left.\begin{array}{l|c}\hline FAS 331: Marriage and Family Relationships (SB) \& 3 <br>
\hline \begin{array}{l}STP 220: Conceptual Statistics OR STP 226: Elements of Statistics (CS) OR SOC 390: <br>
Social Statistics I (CS) OR PSY 230: Introduction to Statistics (CS) OR Lower Division <br>

Computer/Statistics/Quantitative Applications (CS)\end{array} \& 3\end{array}\right]\)| C |
| :--- |
| Humanities, Fine Arts and Design (HU) |
| Natural Science - General (SG) OR |
| Natural Science - Quantitative (SQ) |
| Elective |
| Complete Mathematics (MA) requirement. |
| Complete First-Year Composition requirement. |

Term hours subtotal:

| Term 4 46-60 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| FAS 370: Family Ethnic and Cultural Diversity (SB \& C) | 3 | C |  |
| FAS OR CDE Upper Division Elective | 3 | C |  |
| Historical Awareness (H) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 61-75 Credit Hours | Hours | Minimum Grade | Notes |
| FAS 361: Research Methods (L or SB) | 3 | C |  |


| CLAS Science and Society Elective |  | 3 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| PGS OR SOC Lower Division Elective |  | 3 |  |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| FAS OR CDE Upper Division Elective |  | 3 | C |  |
| Upper Division CLAS Science and Society Elective |  | 3 |  |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| FAS OR CDE Upper Division Elective |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Complete 3 courses: Elective |  | 9 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| FAS OR CDE Upper Division Elective |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
| Complete 2 courses: Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |


| FAS Electives | CDE Electives |
| :---: | :---: |
| FAS 264: Gender and Society (SB \& C) | CDE 312: Adolescence (SB) |
| FAS 294: Special Topics | CDE 337: Early Childhood Intervention |
| FAS 301: Introduction to Parenting | CDE 338: Child Development Practicum |
| FAS 324: Work and the Workplace (SB \& H) | CDE 394: Special Topics |
| FAS 332: Human Sexuality (SB) | CDE 430: Infant/Toddler Development in the Family (SB) |
| FAS 360: Black Families in the Diaspora (SB \& C) | CDE 499: Individualized Instruction |
| FAS 390: Supervised Research Experience |  |
| FAS 435: Advanced Marriage and Family Relationships (L or SB) |  |
| FAS 484: Internship |  |
| FAS 492: Honors Directed Study |  |
| FAS 493: Honors Thesis (L) |  |
| FAS 498: Pro-Seminar |  |
| FAS 499: Individualized Instruction |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec
to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum Cumulative GPA: 2.00 minimum Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Film (Film \& Media Studies), BA

College of Liberal Arts and Sciences
Campus:Online, Tempe
LAFMSBA

| Term 1 0-14 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. FMS 100: Introduction to Film (HU) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Complete all critical courses by the end of semester 4 <br> - 2.50 cumulative GPA recommended in all critical courses |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| LIA 194: Academic Success Seminar, Intro to Liberal Arts and Sciences, Introduction to Liberal Arts and Sciences Online | 1 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Term hours subtotal: | 14 |  |  |


| Term 2 15-28 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 FMS 200: Film History ((L or HU ) \& H) | 3 | C | - 2.50 cumulative GPA recommended in all critical courses |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 29-44 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| FMS 110: Introduction to New Media (L or HU) OR <br> FMS 270: Race and Gender in American Film (HU \& C) OR THP 261: Introduction to Screenwriting | 3 | C | - 2.50 cumulative GPA recommended in all critical courses |
| FMP 201: Film: The Creative Process I (HU) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Social and Behavioral Sciences (SB) | 6 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 45-60 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> FMS 110: Introduction to New Media (L or HU) OR FMS 270: Race and Gender in American Film (HU \& C) OR THP 261: Introduction to Screenwriting | 6 | C | - 2.50 cumulative GPA recommended in all critical courses |
| FMS 300: Television and Cultural Studies (L or HU) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Term hours subtotal: 16 Academic Catalog Archive 2011-2012 1264 |  |  |  |


| Term 5 61-75 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Complete 2 courses: <br> Upper Division FMS Area of Emphasis |  | 6 | C | - Complete second language requirement |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) |  | 4 |  |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 2 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Area of Emphasis AND <br> Upper Division Humanities, Fine Arts and Design (HU) |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division FMS Area of Emphasis |  | 6 | C |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| FMS 490: Capstone Seminar (HU) |  | 3 | C |  |
| Upper Division FMS Area of Emphasis |  | 3 | C |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
| Global Awareness (G) |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division FMS Area of Emphasis |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Complete 3 courses: Elective |  | 9 |  |  |
|  | Term hours subtotal: | 15 |  |  |

- A comprehensive list of Film and Media Studies online courses and the semesters in which they will be offered can be found on our website (film.asu.edu/major).

| Media \& Society Emphasis | Styles \& Genres Emphasis | Media Industries Emphasis |
| :---: | :---: | :---: |
| FMS 300: Television and Cultural Studies (L or HU ) | FMS 340: Contemporary American Film and Popular Culture | FMS 300: Television and Cultural Studies (L or HU ) |
| FMS 312: Film, Media, and Politics Today | FMS 350: Virtual Reality in Film and Media | FMS 302: U.S. Media Now |
| FMS 313: Anti-Semitism in the Media | rging Digital Media (L) | FMS 351. Emerging Dig |
| FMS 345: Asian Pacific Americans and Film ( $\mathrm{HU} \& \mathrm{C} \& \mathrm{H}$ ) | FMS 354: Critical Studies in Animation | FMS 394: Canadian Popular Culture, Fan Cultures and Popular Media, Mobile Media Entertainment |
| FMS 352: Chicana/o Film (C) | FMS 370: Signs of Aliens: Semiotics of Film and Popular Culture (HU) |  |
| FMS 376: Virgin Mary in History, Film, and Culture (L or HU) | FMS 377: Baseball, Film, and American Dreams | FMS 440: Los Angeles: Movies and Culture ( $\mathrm{HU} \& \mathrm{C}$ ) |
| FMS 394: American Jews in U.S.Politics and Media, Canadian Popular Culture | FMS 394: American Directors, Chinese Cinema and Civilization: Kung Fu Films, Films of Coppola, History of Anime, Mobile Media Entertainment, Music Video Theory, Music Video and Its Siblings, Music Videos | FMS 450: Technology, Culture, and Media (L or HU ) |
| FMS 450: Technology, Culture, and Media (L or HU ) |  | FMS 480: Globalization, Technology, and Culture (HU \& G) |
|  | FMS 440: Los Angeles: Movies and Culture ( $\mathrm{HU} \& \mathrm{C}$ ) | FMS 481: Entertainment Technologies |
|  |  | FMS 482: Entertainment Industries |
| FMS 462: Religion and Film | FMS 441: Global Cinema (HU \& G) | FMS 483: Techno-Entertainment Convergences |
| FMS 465: Chicana/o and Latina/o History on Film (HU \& C) | FMS 461: Film Theory and Criticism (HU) |  |


| FMS 468: Crime and Violence in American Film (HU) | FMS 464: Latina/o Literature ((L or HU) \& C) | FMS 494: Television Studies: Reality TV Rituals |
| :---: | :---: | :---: |
| FMS 470: Race, Sex, and Identity Online | FMS 486: Holocaust on Film | FMS 499: EnterTech Course |
| FMS 471: Latinos In Hollywood | FMS 494: Artists on Film, Brazilian |  |
| FMS 494: Artists on Film, Cinema and Justice, Identity and World Film | Experimental Narrative, Italian Cinema, Latin American Documentary Film, Studies in |  |
| FMS 487: Religion and Film |  |  |
| FMS 499: EnterTech Course |  |  |
| WSH 470: Gender and Popular Culture (HU \& C) |  |  |
| COM 323: Communication Approaches to Popular Culture (C) |  |  |
| MCO 473: Sex, Love, and Romance in the Mass Media (SB) |  |  |
| Screenwriting Emphasis |  |  |
| FMS 302: U.S. Media Now |  |  |
| FMS 309: Intermediate Screenwriting |  |  |
| FMS 409: Advanced Screenwriting |  |  |
| FMS 494: Story Analysis for Film and TV |  |  |
| FMS 340: Contemporary American Film and Popular Culture |  |  |
| FMS 494: Screenwriting Workshop |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. Â At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. Â At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.
- Online and On Campus students may substitute THP 261 (Introduction to Screenwriting) with the online course FMS 209 (Screenwriting Fundamentals).
- There is room in this Major Map to add a concurrent degree, a minor, a certificate or an internship.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4, ARIZONA State UNIVERSITY

## 2011-2012 Major Map French, BA

College of Liberal Arts and Sciences
Campus:Tempe
LAFREBA

| Term 1 0-15 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 1. FRE 111: Fundamentals of French |  | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - FRE 111: Fundamentals of French is equivalent to FRE 101: Elementary French and FRE 102: Elementary French |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| MAT 142: College Mathematics (MA) |  | 3 | C |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |  |
| SLC 294: Language Exploration |  | 2 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 2 16-31 Credit Hours Critical course signified by ${ }^{\text {\% }}$ |  | Hours | Minimum Grade | Notes |
| 4 FRE 201: Intermediate French I (G) |  | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) |  | 3 |  |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 3 32-45 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |


| 4 FRE 202: Intermediate French II (G) | 4 | C |  |
| :---: | :---: | :---: | :---: |
| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 46-61 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |


| 1 FRE 205: Readings in French Literature (G) | 3 | C |
| :---: | :---: | :---: |
| 4 FRE 311: French Conversation (G) | 3 | C |
| 4 FRE 312: French Composition (G) | 3 | C |
| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 | C |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |

## Minimum

| Term 5 62-76 Credit Hours |  | Hours | Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| FRE 321: French Literature ((L or HU )\& H) |  | 3 | C | - Minimum grade of C in all FRE, SLC and French Related Fields courses <br> - Enroll in Study Abroad Program credits or listed courses |
| FRE 3** Elective OR <br> FRE 4** Elective |  | 3 | C |  |
| Related Area Course |  | 3 | C |  |
| Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 77-91 Credit Hours |  | Hours | Minimum Grade | Notes |
| FRE 322: French Literature (L or HU) |  | 3 | C | - Minimum grade of C in all FRE, SLC and French Related Fields courses <br> - Enroll in Study Abroad Program credits or listed courses |
| FRE 3** Elective OR <br> FRE 4** Elective |  | 3 | C |  |
| Related Area Course |  | 3 | C |  |
| Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 92-106 Credit Hours |  | Hours | Minimum Grade | Notes |
| FRE 4** Elective AND <br> Upper Division Humanities, Fine Arts and Design (HU) |  | 3 | C | - Minimum grade of C in all FRE, SLC and French Related Fields courses <br> - Enroll in Study Abroad Program credits or listed courses |
| FRE 4** Elective |  | 3 | C |  |
| Upper Division Elective |  | 9 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 107-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| FRE 4** Elective AND <br> Upper Division Humanities, Fine Arts and Design (HU) |  | 3 | C | - Minimum grade of C in all FRE, SLC and French Related Fields courses <br> - Enroll in Study Abroad Program credits or listed courses |
| FRE 4** Elective |  | 3 | C |  |
| SLC 4** Elective OR SLC 498: Pro-Seminar |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective |  | 3 |  |  |
| Elective |  | 2 |  |  |
|  | Term hours subtotal: | 14 |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. At At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement.Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.
- Degree offerings in the School of International Letters \& Cultures are flexible liberal arts majors. Students must bear in mind that the credits toward the major and minor can only be accumulated after completion of preparatory language courses. These preparatory courses are not major requirements and do not count toward the hours the student needs to complete degree requirements. Demonstrated proficiency at the intermediate level is required for enrollment in major requirement courses. Students are strongly encouraged to contact an academic advisor regarding clarifications on course applicability.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map <br> Geography, BA

College of Liberal Arts and Sciences
Campus:Tempe
LAGCUBA

| Term 1 0-14 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| LIA 194: Academic Success Seminar or First-Year Seminar | 1 |  |  |
| Historical Awareness (H) AND Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4-5 | C |  |
| Term hours subtotal: | 14-15 |  |  |
| Term 2 15-30 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| GCU 102: Introduction to Human Geography (SB \& G) OR GCU 121: World Geography (SB \& G) OR GPH 111: Introduction to Physical Geography (SQ) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4-5 | C |  |
| Elective | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Term hours subtotal: | 16-18 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| GCU 102: Introduction to Human Geography (SB \& G) OR GCU 121: World Geography (SB \& G) OR GPH 111: Introduction to Physical Geography (SQ) | 4-3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division Social and Behavioral Sciences (SB) OR Upper Division Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Elective | 1 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 15-14 |  |  |
| Term 4 46-60 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| GCU 102: Introduction to Human Geography (SB \& G) OR GCU 121: World Geography (SB \& G) OR GPH 111: Introduction to Physical Geography (SQ) | 4-3 | C |  |
| 4. Upper Division Regional Course | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including <br> American Sign Language IV. | 4-5 | C |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Term hours subtotal: 15 <br> Academic Catalog Archive 2011-2012 1270 |  |  |  |



GCU 441: Economic Geography (SB)
GCU 442: Geographical Analysis of
Transportation (SB)
GCU 444: Geographic Studies in Urban
Transportation (SB)
GCU 474: Public Land Policy (SB)
GPH 210: Society and Environment (G)
GPH 314: Global Change (HU \& G)
GPH 381: Geography of Natural Resources (G)

GPH 405: Energy and Environment

GCU 424: Geography of Mexico and Middle America (SB \& G)

GCU 425: Geography of the Mexican American Borderland ((L or SB) \& G)

GCU 426: Geography of Russia and Surroundings (SB \& G)

GCU 432: Geography of China (SB \& G)
GCU 433: Geography of Southeast Asia
GPH 433: Alpine and Arctic Environments (G)

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. A At least one of the two courses taken from the list must be upper division. A Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 1 Y ARIZONA STATE UNIVERSITY

## 2011-2012 Major Map <br> Geography, BS

College of Liberal Arts and Sciences
Campus:Tempe
LAGCUBS

| Term 1 0-13 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| LIA 194: Intro to Liberal Arts and Sciences | 1 |  |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Elective | 3 |  |  |
| MAT 170: Precalculus (MA) | 3 | C |  |
| Term hours subtotal: | 13 |  |  |
| Term 2 14-29 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| GCU 102: Introduction to Human Geography (SB \& G) OR GCU 121: World Geography (SB \& G) OR GPH 111: Introduction to Physical Geography (SQ) | 4-3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Complete 2 courses: Elective | 6 |  |  |
| Term hours subtotal: | 16-15 |  |  |
| Term 3 30-45 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| GCU 102: Introduction to Human Geography (SB \& G) OR GCU 121: World Geography (SB \& G) OR GPH 111: Introduction to Physical Geography (SQ) | 4-3 | C |  |
| CLAS Science and Society Elective | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Complete 2 courses: Elective | 6 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |

$\left.\begin{array}{l|c|ccc}\hline & \text { Term hours subtotal: } & 16-15 & \\ \hline \text { Term 4 } 46-60 \text { Credit Hours Critical course signified by }\end{array}\right)$

| Upper Division Technique Course |  | 3 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| Upper Division CLAS Science and Society Elective |  | 3 | C |  |
| Complete 2 courses: Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Topical Course |  | 3 | C |  |
| GCU OR GPH OR PUP Upper Division Elective |  | 3 | C |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| GCU 495: Quantitative Methods in Geography (CS) |  | 3 | C |  |
| GCU Upper Division Elective AND Upper Division Social and Behavioral Sciences (SB) |  | 3 | C |  |
| Upper Division Technique Course |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours Critical course signified by ${ }^{\text {d }}$ |  | Hours | Minimum Grade | Notes |
| GCU 496: Geographic Research Methods (L) |  | 3 | C |  |
| GCU OR GPH OR PUP Upper Division Elective |  | 3 | C |  |
| Upper Division Topical Course |  | 3 | C |  |
| Complete 2 courses: Elective |  | 6 |  |  |
| Term hours subtotal: |  | 15 |  |  |
| Technique Courses | Topical Courses |  |  |  |
| GPH 371: Introduction to Cartography and Georepresentation (CS) | GPH 210: Society and Environment (G) |  |  |  |
| GPH 372: Air Photo Interpretation | GPH 211: Landform Processes (SQ) |  |  |  |
| GPH 373: Geographic Information Science I (CS) | GPH 212: Introduction to Meteorology (SQ) |  |  |  |
|  | GPH 213: Introduction to Climatology (SG) |  |  |  |
| GPH 471: Geographics: Interactive and Animated Cartography and Geovisualization (CS) | GPH 314: Global Change (HU \& G) |  |  |  |
|  | GPH 381: Geography of Natural Resources (G) |  |  |  |
| GPH 473: Geographic Information Science II (CS) | GPH 405: Energy and Environment |  |  |  |
| GPH 483: Geographic Information Analysis | GPH 414: Climate Change (G) |  |  |  |
| GCU 442: Geographical Analysis of Transportation (SB) | GPH 418: Landforms of the Western United States (L) |  |  |  |
| GCU 444: Geographic Studies in Urban Transportation (SB) | GPH 422: Plant Geography |  |  |  |
|  | GPH 433: Alpine and Arctic Environments (G) |  |  |  |
|  | GPH 481: Environmental Geography |  |  |  |
|  | GCU 141: Introduction to Economic Geography (SB \& G) |  |  |  |
|  | GCU 350: The Geography of World Crises (SB \& G) |  |  |  |
|  | GCU 351: Population Geography (SB \& G) |  |  |  |
|  | GCU 361: Urban Geography (SB) |  |  |  |

GCU 364: Energy in the Global Arena (SB \&
G)
GCU 414: Teaching Geography Standards
GCU 441: Economic Geography (SB)
GCU 474: Public Land Policy (SB)

## Notes:

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Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> Geography (Meteorology-Climatology), BS

College of Liberal Arts and Sciences
Campus:Tempe
LAGCUMBS

| Term 1 0-13 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| MAT 170: Precalculus (MA) OR Elective | 3 |  |  |
| LIA 194: Intro to Liberal Arts and Sciences | 1 |  |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 13 |  |  |


| Term 2 14-30 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 . MAT 270: Calculus with Analytic Geometry I (MA) | 4 | C |  |
| 4 GPH 111: Introduction to Physical Geography (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4. MAT 271: Calculus with Analytic Geometry II (MA) | 4 | C |  |
| PHY 121: University Physics I: Mechanics (SQ) AND PHY 122: University Physics Laboratory I (SQ) | 4 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Elective | 4 |  |  |


| Term 4 46-60 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 MAT 272: Calculus with Analytic Geometry III (MA) | 4 | C |  |
| PHY 131: University Physics II: Electricity and Magnetism (SQ) AND PHY 132: University Physics Laboratory II (SQ) | 4 | C |  |
| CLAS Science and Society Elective | 3 | C |  |
| Elective | 4 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 61-76 Credit Hours | Hours | Minimum Grade | Notes |


| GCU 102: Introduction to Human Geography (SB \& G) | 3 |
| :--- | :---: |
| GPH 409: Synoptic Meteorology I | 4 |
| GPH 370: Geographic Information Technologies (CS) | 3 |
| Upper Division CLAS Science and Society Elective | 3 |
| Elective | 3 |


| Term 6 77-90 Credit Hours |  | Hours | Minimum <br> Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| GPH 410: Synoptic Meteorology II |  | 4 | C |  |
| GPH 412: Physical Meteorology |  | 3 | C |  |
| GCU 121: World Geography (SB \& G) |  | 4 | C |  |
| Upper Division Technique Course |  | 3 | C |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| GPH 474: Dynamic Meteorology I |  | 3 | C |  |
| GCU 495: Quantitative Methods in Geography (CS) |  | 3 | C |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| GPH 475: Dynamic Meteorology II |  | 3 | C |  |
| GCU 496: Geographic Research Methods (L) |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |

## Technique Course

GPH 371: Introduction to Cartography and Georepresentation (CS)

GPH 372: Air Photo Interpretation
GPH 373: Geographic Information Science I
(CS)
GPH 471: Geographics: Interactive and
Animated Cartography and Geovisualization
(CS)
GPH 473: Geographic Information Science II (CS)

GPH 483: Geographic Information Analysis
GCU 442: Geographical Analysis of Transportation (SB)

GCU 444: Geographic Studies in Urban Transportation (SB)

## Notes:

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Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)
- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> Geography (Urban Studies), BS

College of Liberal Arts and Sciences
Campus:Tempe
LAGCUUBS

| Term 1 0-13 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| MAT 170: Precalculus (MA) | 3 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences | 1 |  |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 2 14-29 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| GCU 102: Introduction to Human Geography (SB \& G) AND GCU 121: World Geography (SB \& G) AND GPH 111: Introduction to Physical Geography (SQ) | 4-3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Complete 2 courses: Elective | 6 |  |  |
| Term hours subtotal: | 16-15 |  |  |
| Term 3 30-45 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| GCU 102: Introduction to Human Geography (SB \& G) AND GCU 121: World Geography (SB \& G) AND GPH 111: Introduction to Physical Geography (SQ) | 4-3 | C |  |
| CLAS Science and Society Elective | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Complete 2 courses: Elective | 6 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |

Term hours subtotal: 16-15
$\left.\begin{array}{l|lll}\text { Term } 4 & \text { 46-61 Credit Hours Critical course signified by }\end{array}\right)$

Urban Topical Courses
GCU 141: Introduction to Economic
Geography (SB \& G)
GCU 351: Population Geography (SB \& G)
GCU 357: Social Geography (SB)
GCU 359: Cities of the World I (SB \& G \&
H)
GCU 360: Cities of the World II (SB \& G)
GCU 364: Energy in the Global Arena (SB \&
G)
GCU 441: Economic Geography (SB)
GCU 442: Geographical Analysis of
Transportation (SB)
GCU 444: Geographic Studies in Urban
Transportation (SB)
Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has
the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the
202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language
selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam.
The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.A. A A list of
all approved courses, may be found at http://clas.asu.edu/scienceandsociety.A. At least one of the two courses taken from the list must be upper division.A Science and
society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec
to fill a major, minor or related fields requirement.Â At the far right side of the list, you will see which of the three science and society learning goals are filled by
individual courses.A When you complete both courses, all three learning goals must be filled in order to complete the requirement.A Finally, a grade of $C$ or better must
be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4) ARIZONA State UNIVERSITY

## 2011-2012 Major Map <br> German, BA

College of Liberal Arts and Sciences
Campus:Tempe
LAGERBA


| Term 2 15-30 Credit Hours Critical course signified by 4 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 GER 201: Intermediate German (G) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Historical Awareness (H) | 3 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-44 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| 1 GER 202: Intermediate German (G) | 4 | C |  |
| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 45-60 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 1. GER 311: German Conversation (G) AND GER 313: German Composition (G) | 6 | C |  |
| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 61-75 Credit Hours | Hours | Minimum Grade | Notes |



## VTN Elective

APH 300: World Architecture I/Western Cultures (HU \& H \& G)

APH 313: History of Architecture I ((L or HU) \& G \& H)

APH 314: History of Architecture II ((L or $\mathrm{HU}) \& \mathrm{G} \& \mathrm{H})$

APH 414: History of the City $((\mathrm{L}$ or HU $) \&$ H)

APH 446: 20th-Century Architecture I (HU)
APH 447: 20th-Century Architecture II (HU)
ARS 102: Art from Renaissance to Present ( $\mathrm{HU} \& \mathrm{H}$ )

ARS 412: Early Medieval Art (HU)
ARS 414: Romanesque Art (HU \& H)
ARS 416: Gothic Art (HU \& H)
ARS 417: Late Gothic Art in Central Europe
ARS 418: German Renaissance and Reformation Art (HU)

ARS 426: Art of the 17th Century in Northern Europe (HU)

ARS 428: Art of the 18th Century (HU \& H)
ARS 432: 19th-Century French Art and Culture (HU \& H)

ARS 434: Art and Visual Culture of 19th Century (HU)

ARS 436: The Artist, War, and Revolution (Versailles to Vietnam) (HU)

ARS 438: Art of the 20th Century I (HU \& H)
ARS 439: Art of the 20th Century II (HU \& H)

ARS 458: Critical Theories in the Visual Arts (HU)

ARS 485: Women in the Visual Arts (L)
ASB 400: Cultural Factors in International Business (G)

ASB 480: Principles of Linguistics (SB)
ASB 481: Language and Culture (SB)
ASB 483: Sociolinguistics and the
Ethnography of Communication (SB)
COM 263: Elements of Intercultural
Communication (SB \& C \& G)
COM 371: Language, Culture, and Communication (SB \& C \& G)

COM 446: Performance of Literature Written by Women ((L or HU$) \& \mathrm{C})$

COM 463: Intercultural Communication Theory and Research (SB \& G)

COM 465: Intercultural Communication Workshop

DAH 302: Ethnography of Dance Practices ((L or HU) \& G)

DAH 401: Moving Histories (HU)
ECN 306: Survey of International Economics (SB \& G)

ECN 436: International Trade Theory (SB \& G)

ECN 438: International Monetary Economics (SB \& G)

ENG 400: History of Literary Criticism
ENG 429: Cultural Trends in Central Europe, European Romanticism, Fem Pol Fict in East Euro, Feminist Political Writing in
Contemporary Eu, Italian Literature in
Translation, Jewish Culture in Central Europe, Literature \& Film in 20th-Century Eastern Eur, Literature \& Politics in Pre- \& Post-Communis, Politics \& Gender in
Contemporary Europe, Politics of Drama in 20th-Century Europe, Societies and Culture in Modern Europe, Stalinism in Literature and
Film, Studies in European Literature and Culture, Theatre and Politics in Modern Europe

ENG 464: Great Directors (L or HU)
FIN 456: International Financial Management (G)

GCU 121: World Geography (SB \& G)
GCU 253: Introduction to Cultural and Historical Geography (SB \& G)

GCU 322: Geography of U.S. and Canada (SB \& C)

GCU 325: Geography of Europe (SB \& G)
GCU 327: Geography of Africa (SB \& G)
GCU 328: Geography of Middle East and North Africa (SB \& G)

GCU 359: Cities of the World I (SB \& G \& H)

GCU 360: Cities of the World II (SB \& G)
HST 101: Global History Since 1500 (HU \& H \& G)

HST 102: Western Civilization (SB \& H)
HST 103: Western Civilization ((HU or SB) \& H)

HST 104: Western Civilization ((HU or SB) \& G \& H)

HST 202: Historical Themes in Europe ((HU or SB) \& H)

HST 211: American Jewish History (SB \& H)
HST 304: Barbarians in Dark Ages, Britain and New Imperialism, Creation and Destruction, End of Roman Republic, Engl Middle Ages 1471-1529, Europe in World History Since 1789, European Enlightenment, European Migrations, History of Jewish
Mysticism, King Alfred: Man or Myth?,
Medieval England 1216-1399, Middle Ages
Recyc: Medievalism, Migration in Modern European History, Occup and Collab w/Europe, Pausanias: Trvlr in Roman, Religion/Rblln:SE Englnd,
Rockers/Rebels/Romantics, Scottish History, Shakespeare and the Virgin Queen, Shoah: History, Memory, and Representation, Studies in European History, Survey Eng
Literature\&Culture Cambridge Connection
HST 316: 20th-Century U.S. Foreign Relations (SB \& G \& H)

HST 325: Immigration and Ethnicity in the United States (SB \& H \& C)

HST 349: Early Middle Ages ((HU or SB) \& H)

HST 350: Later Middle Ages ((HU or SB) \&
$\mathrm{H})$ H)

HST 351: Renaissance Europe ((L or HU or SB) \& H)

| HST 352: Europe's Reformations ((L or HU or SB) \& H) |
| :---: |
|  |
| HST 354: Revolutionary Europe (SB \& H) |
| HST 355: Total War \& the Crisis of Modernity (SB \& G \& H) |
| HST 356: Europe since 1945 (SB \& G \& H) |
| HST 359: Jewish History from 1492 to 1948 (SB \& G \& H) |
| HST 361: Witchcraft and Heresy in Europe ((L or HU )\& H) |
| HST 362: Sex and Society in Classical and Medieval Europe (SB \& H) |
| HST 363: Sex and Society in Early Modern Europe ((HU or SB) \& H) |
| HST 364: Sex and Society in Modern Europe ((L or SB) \& H) |
| HST 365: Women in Europe, 1750 to Present ((L or HU or SB) \& H) |
| HST 368: Culture and Imagination in European History (HU \& H) |
| HST 429: Modern Germany (SB \& G \& H) |
| HST 431: East Euro/the Balkans-Pre 1914 (SB \& H) |
| HST 432: East Euro/ the Balkans-20 Cent (SB \& G \& H) |
| MGT 302: Principles of International Business (G) |
| IBS 306: Survey of International Economics |
| IBS 400: Cultural Factors in International Busness |
| JUS 415: Gender and International Development (L \& G) |
| MCO 430: International Mass Communication (G) |
| MGT 459: International Management (G) |
| MHL 341: Music History (HU) |
| MHL 342: Music History (HU) |
| MHL 344: Music in World Cultures (HU \& G) |
| MHL 438: Topics in 18th-Century Music (H) |
| MHL 439: Topics in 19th-Century Music (L \& H) |
| MHL 440: Music Since 1900 (L or HU) |
| MHL 456: History of Opera |
| MKT 435: Entrepreneurial Marketing |
| PHI 302: History of Modern Philosophy (HU \& H) |
| PHI 311: Philosophy in Literature (HU) |
| PHI 315: Philosophy of Language (HU) |
| PHI 401: Rationalism |
| PHI 402: Empiricism (HU) |
| PHI 403: Contemporary Analytic Philosophy (HU) |
| PHY 252: Physics III (SQ) |

PHY 314: Quantum Physics I

| PLC Elective |
| :---: |
| POS 150: Comparative Government (SB \& G) |
| POS 160: Global Politics (SB \& G) |
| POS 260: Current Issues in International Politics ((L or SB) \& G) |
| POS 300: Contemp Global Controversies (SB \& G) |
| POS 340: History of Political Philosophy I <br> ( $\mathrm{HU} \& \mathrm{H}$ ) |
| POS 341: History of Political Philosophy II ( $\mathrm{HU} \& \mathrm{H}$ ) |
| POS 356: European Union (SB \& G) |
| POS 360: Asia-Pacific World Affairs, Asian International Politics, Current Issues International Politics, Environment and World Politics, European Union, Global Terrorism, International Conflict in a Historical Context, International Relations and Asia, International Security, Liberal Studies, Organizational Studies, Politics of the Middle East, Postcolonial Politics: Power, Resistance, \& Subjec, Psychology and Politics, Realism, World Politics |
| POS 465: International Organization and Law (SB \& G) |
| POS 467: International Security (SB \& G) |
| POS 486: International Political Economy (SB \& G) |
| SCM 463: Global Supply Chain Management |
| SHS 101: American Sign Language I |
| SHS 102: American Sign Language II |
| SHS 201: American Sign Language III |
| SHS 202: American Sign Language IV |
| TDM 205: Introduction to Travel and Tourism (G) |
| TDM 458: International Tourism (G) |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. At At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses.Â When you complete both courses, all three learning goals must be filled in order to complete the requirement. A Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.
- Degree offerings in the School of International Letters \& Cultures are flexible liberal arts majors. Students must bear in mind that the credits toward the major and minor can only be accumulated after completion of preparatory language courses. These preparatory courses are not major requirements and do not count toward the hours the student needs to complete degree requirements. Demonstrated proficiency at the intermediate level is required for enrollment in major requirement courses. Students are strongly encouraged to contact an academic advisor regarding clarifications on course applicability.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> Global Health, BA

College of Liberal Arts and Sciences
Campus:Tempe
LASSHBA

| Term 1 0-14 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Consult academic advisor for Academic Success Clusters, and First Year Seminar options |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| ASB 102: Introduction to Cultural and Social Anthropology (SB \& G) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including <br> American Sign Language IV. | 4 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences | 1 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-30 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 1. SSH 100: Introduction to Global Health (SB \& G) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-44 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |


| ASM 345: Disease and Human Evolution OR |  |  |
| :---: | :---: | :---: |
| SSH 301: Global History of Health (SB \& H) OR | 3 | C |
| SSH 401: Health and Human Biology |  |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |
| $\begin{aligned} & \text { Natural Science - Quantitative (SQ) OR } \\ & \text { Natural Science - General (SG) } \end{aligned}$ | 4 |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |

Complete First-Year Composition requirement.
Complete Mathematics (MA) requirement.
Term hours subtotal: 14

| Term 4 45-67 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ASB 355: Traditional Medicine and Healing (HU or SB) OR <br> SSH 200: Food and Culture ((L or SB) \& C) OR <br> SSH 404: Medical Anthropology: Culture and Health (C) | 3 | C | - Second language completed; a grade of C or higher is required for completion of the second language |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C | language <br> - All global health majors are required to go on a summer |
| Elective | 3 |  | study abroad the summer after term four. The 6 hours at the |
| Upper Division Elective | 3 |  | bottom of term 4 reflect the six |


| SSH 403: Cross-Cultural Studies in Global Health (SB \& G) | 3 | C | hours that must be completed abroad through the School of Human Evolution and Social Change. |
| :---: | :---: | :---: | :---: |
| Upper Division Global Health Elective Courses in Related Areas | 3 | C |  |
| Term hours subtotal: | 23 |  |  |
| Term 5 68-82 Credit Hours | Hours | Minimum Grade | Notes |
| SSH 370: Production, People, and Environments (SB) OR <br> SSH 400: Poverty, Social Justice, and Global Health ((L or SB) \& G) OR <br> SSH 414: Urban and Environmental Health (SB) | 3 | C |  |
| Upper Division Global Health Elective Courses in Related Areas | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) AND Upper Division Cultural Diversity in the U.S. (C) OR Upper Division Historical Awareness (H) | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 83-94 Credit Hours | Hours | Minimum Grade | Notes |
| Upper Division Global Health Elective Courses in Related Areas | 6 | C |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 12 |  |  |
| Term 7 95-108 Credit Hours | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| SSH 402: Community Partnerships for Global Health (SB) OR <br> SSH 494: Doing Research in Global Health OR <br> SSH 499: Individualized Instruction | 3-9 | C | - Practicum to be completed by term 7 <br> - Study abroad requirement must be completed by term 7 |
| Upper Division Global Health Elective Courses in Related Areas | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Elective | 5 |  |  |
| Term hours subtotal: | 14-20 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| SSH 405: Senior Seminar in Global Health | 3 | C | - Cannot enroll in SSH 405 until student has completed required Global Health study abroad and practicum |
| Upper Division Global Health Elective Courses in Related Areas | 3 | C |  |
| Elective | 3 |  |  |
| Upper Division Elective | 3 |  |  |

Term hours subtotal: 12

| SSH Elective: Poverty and Social Justice | SSH Elective: Time Depth |
| :---: | :---: |
| ASB 202: Immigration and Ethnic Relations | ASB 301: Global History of Health (SB \& H) |
| in the U.S. (SB \& H \& |  |
| ASB 370: Production, People, and |  |
| Environments (SB) | SSH 401: Health and Human Biology |
| ASB 394: Production, People, and Environments |  |
| ASB 410: Poverty, Social Justice, and Global Health ((L or SB) \& G) |  |
| ASM 348: Social Issues in Human Genetics (SB) |  |
| SGS 394: Principles of Econ Dev Global |  |
| SGS 394: Violence/Conflict/Human Right |  |

SSH Elective: Culture, Society and Health
AFS 294: Health Issues in African American
Communities
ASB 200: Food and Culture ((L or SB) \& C)
ASB 462: Medical Anthropology: Culture and
Health (C)
HON 494: Religion \& Bioethics
HST 312: History of Women in Science and
Medicine (HU or SB)
NTR 348: Cultural Aspects of Food (SB \& C
\& G)
SOC 427: Sociology of Health and Illness
(SB)

| SOC 370: Production, People, and |
| :--- |
| Environments (SB) |
| SOC 424: Women and Health (SB) SSH 200: Food and Culture ((L or SB) \& C) <br> SOS 370: Production, People, and <br> Environments (SB) SSH 404: Medical Anthropology: Culture and <br> Health (C) <br> SSH 400: Poverty, Social Justice, and Global <br> Health ((L or SB) \& G) TCL 323: Latino Health Issues (SB \& C) <br> TCL 327: Health and Migration (SB) TCL 326: Health of Chicanas and Latinas (SB <br> TCL 422: U.S.-Mexico Border Health TCL 410: Race, Medicine, and the Body (L) <br> TCL 443: Political Ecology of the Border (SB <br> \& G) WST 360: Women as Healers (SB \& G) |

WST 394: Women and International Health
SSH Elective: Health and Biology

| SSH Elective: Other |
| :--- |
| Hunter-Gatherers |


| ASM 342: Evolution, Ecology, and Human |
| :--- |
| Biological Variation |

ASM 345: Disease and Human Evolution
ASB 394: Production, People, and
Environments

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. At At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. A Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.


## -

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> Global Studies, BA

College of Liberal Arts and Sciences
Campus:Tempe
LASGSBA

| Term 1 0-11 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. LIA 194 or UNI 194: Academic Success Seminar or First Year Seminar equivalent are acceptable substitutions for SGS 191. |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| SGS 191: Access to the World OR <br> LIA 194: Intro to Liberal Arts and Sciences | 1 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Term hours subtotal: | 11 |  |  |


| Term 2-12-30 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 SGS 101: Thinking Globally: The Individual and Authority (SB) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Elective | 2 |  |  |
| Term hours subtotal: | 19 |  |  |
| Term 3 31-44 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 4 SGS 204: Professional Global Career Development | 3 | C | - Completed SGS coursework must reflect at least TWO tracks in order to fulfill requirement. |
| SGS Elective | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including <br> American Sign Language IV. | 4 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 45-60 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| 4 SGS 305: Research Methods (L) | 3 | C |  |
| SGS Elective | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including <br> American Sign Language IV. | 4 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |


| Term 5 61-75 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Complete 2 courses: <br> SGS Upper Division Elective |  | 6 | C | - Related area course options (upper division only): AFS, ASB, ASM, BIO, COM, ECN, GCU, GPH, HPS, HST, IBS, JUS, PAF, POS, PUP, REL, SGS, SOS, WST <br> - Completed SGS coursework must reflect at least TWO tracks in order to fulfill requirement. |
| Upper Division Related Area Course |  | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| SOC 390: Social Statistics I (CS) OR POS 401: Political Statistics (CS) |  | 3 | C |  |
| SGS Upper Division Elective |  | 3 | C |  |
| Global Awareness (G) |  | 3 |  |  |
| Complete 2 courses: <br> Upper Division Related Area Course |  | 6 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Related Area Course |  | 3 | C |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Historical Awareness (H) |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| SGS 484: Internship |  | 6 | C | - Internship must be international and approved by internship coordinator before start. |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
| Elective |  | 3 |  |  |


| Upper Division Related Area Course | SGS Elective: Economic Development Track | SGS Elective: Cultural Perspectives \& Place Track |
| :---: | :---: | :---: |
| AFS Elective | SGS 394: Economic Development in Historical Perspective |  |
|  |  | SGS 111: Global History Since 1500 (HU \& H \& G) |
| ASB Elective |  |  |
| ASM Elective | SGS 394: Economic Development in Transitional Societies | SGS 194: Religion and Globalization |
| BIO Elective | SGS 394: Global Markets | SGS 240: Introduction to Southeast Asia ((HU or SB) \& G) |
| COM Elective | SGS 394: Policies for Economic Development |  |
|  |  | SGS 303: Global Trends (SB) |
| ECN Elective | SGS 394: Principles of Econ Dev Global | SGS 394: Placemaking in a Globalizing World |
| GCU Elective |  |  |
| GPH Elective | SGS 394: Global Trade in Real Time | SGS 394: China in Transition |
| HPS Elective | SGS 494: Capstone:Understanding China | SGS 394: Yoruba in the African Diaspora |
| HST Elective |  | SGS 394: Islam and World Affairs |
| IBS Elective |  | SGS 394: Islam \& Islamic Societies in Africa |
| JUS Elective |  | SGS 394: Cultural Aspects of Globalization |
| PAF Elective |  | SGS 394: Religions of India |
| POS Elective |  | SGS 394: Globalization and China |


| PUP Elective |
| :--- |
| REL Elective |
| SGS Elective |
| SOS Elective |
| WST Elective |
| SGS Elective: Global Governance Track |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. $\hat{A}$ At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. Â When you complete both courses, all three learning goals must be filled in order to complete the requirement.A Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> History, BA

College of Liberal Arts and Sciences
Campus:Online, Tempe
LAHISBA

| Term 1 0-17 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4. HST Elective | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences OR First-Year Seminar | 1 |  |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including <br> American Sign Language IV. | 4 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Maintain 2.25 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 2 18-31 Credit Hours Critical course signified by 4 | Hours | Minimum Grade | Notes |
| 4 HST Elective | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Maintain 2.25 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 32-48 Credit Hours Critical course signified by ${ }^{\text {e }}$ | Hours | Minimum Grade | Notes |
| 4 HST course (SB) | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Global Awareness (G) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Elective | 4 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Maintain 2.25 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 4 49-62 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| - HST course (SB and H) | 3 | C |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Maintain 2.25 GPA in Critical Tracking Courses. |  |  |  |


| Term 5 63-77 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| HST 300 AND <br> Upper Division Literacy and Critical Inquiry (L) |  | 3 | C | - The sequence of history courses shown here is a suggested one. Except where prerequisites dictate the order in which certain courses must be taken, students should consult with an academic advisor to determine the best sequence of courses for their personal plan of study. |
| HST Upper Division Elective |  | 3 | C |  |
| Complete 2 courses: Related Area Course |  | 6 | C |  |
| HST Upper Division Elective |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 78-92 Credit Hours |  | Hours | Minimum Grade | Notes |
| HST 302: Studies in History OR <br> HST 303: Studies in Asian History OR <br> HST 304: Studies in European History OR HST 305: Studies in Latin American History OR HST 306: Studies in United States History OR HST 307: Studies in African History AND Social and Behavioral Sciences (SB) |  | 3 | C |  |
| HST Upper Division Elective |  | 3 | C |  |
| Upper Division Related Area Course |  | 3 | C |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 93-107 Credit Hours |  | Hours | Minimum Grade | Notes |
| HST 498: Pro-Seminar AND <br> Upper Division Literacy and Critical Inquiry (L) |  | 3 | C |  |
| Upper Division HST course (HU) OR Upper Division HST course (SB) |  | 3 |  |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Upper Division Related Area Course |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 108-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> Upper Division Related Area Course |  | 6 | C |  |
| Upper Division General Education Elective |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 1 |  |  |
|  | Term hours subtotal: | 13 |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. At At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. $\hat{A}$ At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

| I. First Year Composition (3-6 hours) | 1 | Total <br> Hours | UD <br> Hours | Res <br> Hours |
| :--- | :---: | :---: | :---: | :---: |
| GNG 101:First Year Comp 1 (3) and |  |  |  |  |
| ENG 102:First Year Comp 2 (3) or, if eligible |  |  |  |  |
| ENG 105: Advance First Year Comp (3) |  |  |  |  |

## II. University General Studies (35 hours)

Humanities/Fine Arts \& Social/Behavioral Sciences (15 hours) Required: 15 hours combined; 6 hours in one area, 9 hrs in the other AND one course must be upper
division.

| HU: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| HU: |  |  |  |  |
| SB: |  |  |  |  |
| SB: |  |  |  |  |
| HU or SB: |  |  |  |  |
| Natural Sciences (8 hours) |  |  |  |  |
| SQ: |  |  |  |  |
| SQ/SG: |  |  |  |  |
| Mathematics \& Statistics/Computer Applications (6 hours) |  |  |  |  |
| MA: |  |  |  |  |
| CS: |  |  |  |  |

Literacy \& Critical Inquiry (6 hours)

| $\mathrm{L}:$ |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Upper division L: |  |  |  |  |

Awareness Areas (2 courses minimum and must fulfill all 3 areas)
Double counting is permissible between Awareness Areas, other courses that fulfill graduation requirements, and within the Awareness Areas.

| Global Awareness (G): |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Historical Awareness (H): |  |  |  |  |
| Cultural Diversity (C): |  |  |  |  |

## III. College of Liberal Arts and Sciences ( 6 hours)

Second Language Required: Students must complete a second language through the Intermediate II level. For most languages, this is the 202 level.
For some, it is 314 or higher.
$\qquad$

| Total Hours <br> Required (120 <br> hrs. min) | Upper Division <br> Hours Required <br> (45 hrs min) | ASU Resident <br> Hours Required <br> (30 hrs min) | Max. 2-yr Transfer <br> Hours allowed (64 <br> hrs max.) | Minimum GPA <br> required (2.00 <br> min.) | ASU Resident Hours for <br> Academic Recounition (56 <br> hrs min) |
| :--- | :--- | :--- | :--- | :--- | :--- |
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[^18]Major Map: Integrated Studies -
Bachelor of Arts (B.A.)
College of Liberal Arts and Sciences | Catalog Year: 2011-2012

| III. Integrated Studies Courses (min. 45 hours) ${ }^{2}$ <br> Courses used for the major may not also be used to fill the university general studies or college requirements | Total Hours | $\begin{array}{\|c\|} \hline \text { UD } \\ \text { Hours } \\ \hline \end{array}$ | Res Hours | Grade |
| :---: | :---: | :---: | :---: | :---: |
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## IV. Electives

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| I. First Year Composition (3-6 hours) |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  | Total <br> Hours | UD <br> Hours | Res <br> Hours |
| Grade |  |  |  |  |
| ENG 101:First Year Comp 1 (3) and |  |  |  |  |
| ENG 102:First Year Comp 2 (3) or, if eligible |  |  |  |  |
| ENG 105: Advance First Year Comp (3) |  |  |  |  |

## II. University General Studies (35 hours)

Humanities/Fine Arts \& Social/Behavioral Sciences (15 hours) Required: 15 hours combined; 6 hours in one area, 9 hrs in the other AND one course must be upper
division.

| HU: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| HU: |  |  |  |  |
| SB: |  |  |  |  |
| SB: |  |  |  |  |
| HU or SB: |  |  |  |  |
| Natural Sciences (8 hours) |  |  |  |  |
| SQ: |  |  |  |  |
| SQ/SG: |  |  |  |  |
| Mathematics \& Statistics/Computer Applications (6 hours) |  |  |  |  |
| MA: |  |  |  |  |
| CS: |  |  |  |  |

Literacy \& Critical Inquiry (6 hours)


Awareness Areas (2 courses minimum and must fulfill all 3 areas)
Double counting is permissible between Awareness Areas, other courses that fulfill graduation requirements, and within the Awareness Areas.

| Global Awareness (G): |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Historical Awareness (H): |  |  |  |  |
| Cultural Diversity (C): |  |  |  |  |

## III. College of Liberal Arts and Sciences ( 6 hours)

Science and Society ( 6 hours). Required: 6 hours from the Science and Society website; at least one course must be upper division and there is a C minimum required for each course.

SS 1:
SS2:

| Total Hours <br> Required (120 <br> hrs. min) | Upper Division <br> Hours Required <br> (45 hrs min) | ASU Resident <br> Hours Required <br> (30 hrs min) | Max. 2-yr Transfer <br> Hours allowed (64 (64 <br> hrs max.) | Minimum GPA <br> required (2.00 <br> min.) | ASU Resident Hours for <br> Academic Recognition (56 <br> hrs min) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

${ }^{1}$ Complete First-Year Composition and Mathematics (MA) requirement by the end of term 3 ${ }^{2}$ Integrated Studies courses are selected in consultation with an advisor. Students may not choose to major in Integrated Studies as freshmen. Instead, the major is approved on a case by case basis from students who have completed at least 30 graded hours at ASU and who have earned a minimum GPA of 3.25 . In addition, students are required to submit three letters from faculty who are willing to mentor them through the program as well as to design a set of courses that create a holistic major that is unavailable at ASU in any other form. All information is to be submitted to Asst. Dean Barbara Colby, who will determine the viability and integrity of the proposed degrees

Major Map: Integrated Studies -
Bachelor of Science (B.S.)
College of Liberal Arts and Sciences | Catalog Year: 2011-2012

| III. Integrated Studies Courses (min. 45 hours) ${ }^{2}$ <br> Courses used for the major may not also be used to fill the university general studies or college requirements | Total Hours | $\left\lvert\, \begin{array}{\|c\|} \text { UD } \\ \text { Hours } \end{array}\right.$ | Res Hours | Grade |
| :---: | :---: | :---: | :---: | :---: |
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## IV. Electives



Major Map: International Letters and Cultures -<br>Bachelor of Arts (B.A.)<br>College of Liberal Arts and Sciences | Catalog Year: 2011-2012



| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN：91－105 CREDIT HOURS |  |  |  |  |  |
| Approved Program of Study upper division Course（see note） | 3 | 囚 |  | Grade of C | －Maintain minimum 2.33 cumulative ASU GPA （required for graduation）． <br> －Approved Program of Study courses to be selected from approved and current Program of Study． <br> －Meet with SILC Academic Advisor to prepare for final semester． |
| Approved Program of Study upper division Course（see note） | 3 | 区 |  | Grade of C |  |
| Approved Program of Study upper division Course（see note） | 3 | 区 |  | Grade of C |  |
| Upper－Division Social／Behavioral Science（SB）or Humanities，Fine Arts \＆Design（HU） | 3 | 区 |  |  |  |
| Upper－Division Elective | 3 | 区 |  |  |  |
| TERM EIGHT：106－120 CREDIT HOURS |  |  |  |  |  |
| SLC 400－level course or SLC 498：Capstone | 3 | 区 |  | Grade of C | －MILESTONE：Must have earned 9 （nine）upper－ division hours in primary target language courses by the end of term 8 ． <br> －Maintain minimum 2.33 cumulative ASU GPA （required for graduation）． <br> －Approved Program of Study courses to be selected from approved and current Program of Study． |
| Approved Program of Study upper division Course（see note） | 3 | 区 |  | Grade of C |  |
| Approved Program of Study upper division Course（see note） | 3 | 囚 |  | Grade of C |  |
| Approved Program of Study upper division Course（see note） | 3 | 囚 |  | Grade of C |  |

## Graduation Requirements Summary：

| Total Hours <br> $(120$ minimum $)$ | Total UD Hours <br> （minimum 45） | Cumulative GPA <br> $(2.00$ minimum） | Total Hrs at ASU <br> （ minimum 30） | Resident Credit for <br> Academic Recognition <br> （minimum 56） |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |

## General University Requirements：Legend

－Literacy and Critical Inquiry（L）
－Mathematical Studies（MA）
－Computer／Statistics／Quantitative applications（CS）
－Humanities，Fine Arts，and Design（HU）
－Social and Behavioral Sciences（SB）
－Natural Science－Quantitative（SQ）
－Natural Science－General（SG）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）
－Global Awareness（G）
－Historical Awareness（H）
－First－Year Composition

## Additional Notes：

## 2011-2012 Major Map International Letters \& Cultures (Classics), BA

College of Liberal Arts and Sciences
Campus:Tempe
LASLCCBA


| HST 347: Ancient Greece (SB \& H) OR HST 348: Rome (SB \& H) OR HST 394: Special Topics |  | 3 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) |  | 3 |  |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Minimum 2.33 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15-16 |  |  |
| Term 5 62-76 Credit Hours |  | Hours | Minimum Grade | Notes |
| HST 347: Ancient Greece (SB \& H) OR <br> HST 348: Rome (SB \& H) OR <br> HST 394: Special Topics |  | 3 | C | - Latin emphasis choose LAT, Greek emphasis choose PHI <br> - HST 394 must be Greek or Roman History |
| LAT 421: Roman Literature (HU) OR PHI 301: History of Ancient Philosophy (HU \& H) |  | 3 | C |  |
| Global Awareness (G) |  | 3 |  |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 77-91 Credit Hours |  | Hours | Minimum Grade | Notes |
| LAT 422: Roman Literature (HU) OR Upper Division Elective |  | 3 | C | - Latin emphasis choose LAT, Greek emphasis choose Elective <br> - LAT 422 is for the Latin track only. |
| Classics Elective |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 92-106 Credit Hours |  | Hours | Minimum Grade | Notes |
| Complete 2 courses: Classics Elective |  | 6 | C |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
| Humanities, Fine Arts and Design (HU) OR Social and Behavioral Sciences (SB) | 3 |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 107-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| SLC 400: Linguistics (SB) |  | 3 | C |  |
| Complete 3 courses: Upper Division Elective |  | 11 |  |  |
|  | Term hours subtotal: | 14 |  |  |

[^19]- Special topics courses must be related to Classical Studies; students will be required to provide a syllabus for the requested course to the SILC academic advisor prior to taking the course. For information regarding elective courses click on the related fieldsÂ link at this page: http://silc.asu.edu/undergraduate/majors-minors-certs.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Italian, BA

College of Liberal Arts and Sciences
Campus:Tempe
LAITABA

| Term 1 0-15 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ITA 101: Elementary Italian I OR <br> ITA 111: Accelerated Elementary Italian | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ITA 111: Accelerated Elementary Italian is equivalent to ITA 101: Elementary Italian I and ITA 102: Elementary Italian II |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |
| SLC 294: Language Exploration | 2 |  |  |
| Term hours subtotal: | 15 |  |  |



Term hours subtotal: 14

| Term 4 46-62 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ¢ ITA 202: Intermediate Italian II (G) | 4 | C |  |
| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Elective | 3 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |
| Humanities, Fine Arts and Design (HU) OR Social and Behavioral Sciences (SB) | 3 |  |  |
|  | 17 |  |  |


| Term 5 63-77 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ITA 311: Italian Conversation (G) |  | 3 | C | - Minimum grade of C in all ITA, SLC and Italian Related Fields courses <br> - Enroll in Study Abroad Program credits or listed courses |
| ITA 312: Italian Composition (G) |  | 3 | C |  |
| ITA 3** Elective OR <br> ITA 4** Elective |  | 3 | C |  |
| Upper Division Related Area Course |  | 3 | C |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 78-92 Credit Hours |  | Hours | Minimum Grade | Notes |
| ITA 321: Introduction to Italian Literature I |  | 3 | C | - Minimum grade of C in all ITA, SLC and Italian Related Fields courses <br> - Enroll in Study Abroad Program credits or listed courses |
| Related Area Course |  | 3 | C |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
| ITA 4** Elective |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 93-107 Credit Hours |  | Hours | Minimum Grade | Notes |
| ITA 322: Introduction to Italian Literature II (HU) |  | 3 | C | - Minimum grade of C in all ITA, SLC and Italian Related Fields courses <br> - Enroll in Study Abroad Program credits or listed courses |
| ITA 413: Advanced Italian (G) |  | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Elective |  | 3 |  |  |
| ITA 4** Elective |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 108-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| ITA $4 * *$ Elective |  | 3 | C | - Minimum grade of C in all ITA, SLC and Italian Related Fields courses <br> - Enroll in Study Abroad Program credits or listed courses |
| SLC 4** Elective OR <br> SLC 498: Pro-Seminar |  | 3 | C |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
| Elective |  | 1 |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. A At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. Â When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.
- Degree offerings in the School of International Letters \& Cultures are flexible liberal arts majors. Students must bear in mind that the credits toward the major and minor can only be accumulated after completion of preparatory language courses. These preparatory courses are not major requirements and do not count toward the hours the student needs to complete degree requirements. Demonstrated proficiency at the intermediate level is required for enrollment in major requirement courses. Students are strongly encouraged to contact an academic advisor regarding clarifications on course applicability.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

Hrs Resident Credit for

Computer/Statistics/Quantitative Applications (CS)

- Humanities, Fine Arts and Design (HU
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Jewish Studies, BA

College of Liberal Arts and Sciences
Campus:Tempe
LAJSTBA

| Term 1 0-14 Credit Hours Critical course signified by 9 | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| JST 210: Introduction to Judaism ((L or HU )\& H) OR JST 230: Introduction to Jewish Civilization OR Lower Division Track Focus Area Course OR HST 211: American Jewish History (SB \& H) | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Modern or Biblical Hebrew at the intermediate level (202 or equivalent). | 4 | C |  |
| LIA 194: Academic Success Seminar, Intro to Liberal Arts and Sciences | 1 |  |  |
| 9. Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-29 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| JST 210: Introduction to Judaism ((L or HU )\& H) OR JST 230: Introduction to Jewish Civilization OR Lower Division Track Focus Area Course OR HST 211: American Jewish History (SB \& H) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Modern or Biblical Hebrew at the intermediate level (202 or equivalent). | 4 | C |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Elective | 1 |  |  |
| 4. Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 30-45 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| JST 210: Introduction to Judaism ((L or HU )\& H) OR JST 230: Introduction to Jewish Civilization OR Lower Division Track Focus Area Course OR HST 211: American Jewish History (SB \& H) | 6 | C |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Modern or Biblical Hebrew at the intermediate level (202 or equivalent). | 4 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| 4. Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 46-59 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 4 Course from Outside of Track | 3 | C | - If JST 210 already completed, take an elective |
| JST 210: Introduction to Judaism ((L or HU )\& H) OR Literacy and Critical Inquiry (L) | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Modern or Biblical Hebrew at the intermediate level (202 or equivalent). | 4 | C |  |


| Milestone: Must have completed either JST/REL 210: Introduction to Judaism or JST 230: Introduction to Jewish Civilization |  |  |  | Notes |
| :---: | :---: | :---: | :---: | :---: |
|  | Term hours subtotal: | 14 |  |  |
| Term 5 60-74 Credit Hours |  | Hours | Minimum Grade |  |
| Upper Division Course from Outside of Track |  | 3 | C |  |
| Upper Division Related Area Course |  | 3 | C |  |
| Related Area Course |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 75-89 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Track Focus Area Course |  | 3 | C |  |
| Upper Division Course from Outside of Track |  | 3 | C |  |
| Upper Division Related Area Course |  | 3 | C |  |
| Related Area Course |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 90-104 Credit Hours |  | Hours | Minimum Grade | Notes |
| JST 491: History of Anti-Semitism OR <br> JST 495: Judaism, Science and World Religions OR JST 496: Biblical Narratives: Literary Approaches |  | 3 | C |  |
| Upper Division Track Focus Area Course |  | 3 | C |  |
| Upper Division Related Area Course |  | 3 | C |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 105-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Track Focus Area Course |  | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Upper Division Elective |  | 6 |  |  |
| Elective |  | 1 |  |  |
| Term hours subtotal: |  | 16 |  |  |
| Related Area | Literature and Culture Track | Religion and Thought Track |  |  |
| ASB 430: Social Simulation (CS) | JST 210: Introduction to Judaism ((L or HU ) \& H) | JST 210: Introduction to Judaism ((L or HU )\& H) |  |  |
| AFH 318: African and African Diaspora Women Writers (HU \& G) | HST 211: American Jewish History (SB \& H) | HST 211: American Jewish History (SB \& H) |  |  |
| AFH 394: Unruly Voices | JST 230: Intro to Jewish Civilization | JST 230: Intro to Jewish Civilization |  |  |
| AFR 191: Black Experiences with other Minorities, First Year Seminar, Language of the Civil Rights Movement, Mapping African Diaspora, Slave Narratives | JST 496: Biblical Narratives: Literary Approaches | JST 495: Judaism, Science and World Religions |  |  |
|  | FMS 313: Anti-Semitism in the Media | REL 300: Research, Writing, and Thinking in Religion and Applied Ethics (L or HU) |  |  |
| AFR 375: Race, Gender and Sport (SB \& C) | REL 384: The Bible and Archaeological Discoveries | HST 302: AFRICA: Islam in African History, AFRICA: Women in Islam, EUROPE: Judaism and Ecology, Sex and Scandal, Studies in History, US: Jazz and Culture |  |  |
| AFR 394: Politics: Race, Ethnicity, and Barack Obama, Race, Ethnicity, and Dem in a P, Race, Ethnicity/Politics | Discoveries <br> FMS 394: American Jews in U.S.Politics and Media |  |  |  |  |
| AFS 200: Introduction to African and African Diaspora Studies (SB \& G \& H) | REL 394: Biblical Prophets \& Prophecy, The Poetry and Poetics of the Psalms | $\begin{aligned} & \text { REL } \\ & \text { HU) } \end{aligned}$ | tual, Symbol |  |


| AFS 301: Race and Racism in Africa/African Diaspora (SB \& G) | REL 396: Women in the Bible | HST 314: American Cultural History Since 1865 ((HU or SB) \& H) |
| :---: | :---: | :---: |
| AFS 312: Contemporary African and African Diaspora Women | REL 405: Emotions in Hebrew Bible: Narr on Being Human | REL 315: Hebrew Bible (Old Testament) ((L or HU ) \& H ) |
| AFS 332: Life and Death in Ancient Egypt | ENG 494: Comparative Ethnic Literature: Autobiographies | REL 317: Introduction to Rabbinic Judaism ( $\mathrm{HU} \& \mathrm{H}$ ) |
| AFS 360: Black Families in the Diaspora: U.S. and Caribbean |  | HEB 394: Sex and Gender in Modern Jewish Culture |
| AFS 370: Family, Ethnic, and Cultural Diversity (SB \& C) |  | BIO 494: Religion and Bioethics |
| ARS 402: Art of Ancient Egypt (HU \& H) |  |  |
| CRJ 100: The Justice System (SB) |  |  |
| CRJ 306: Race, Ethnicity, and Justice (C) |  |  |
| CRJ 350: Law and Social Control (SB) |  |  |
| ENG 423: Revenge Tragedies (L or HU) |  |  |
| ENG 430: 19th C British Culture Background, Culture and Empire, Empire and Culture, Imagin and Class, Pre-Raphael \& Victorian Poetry, Pre-Raphaelites, Self-Culture, Spectcl of Loss 19th Cent, Studies in Victorian Literature and Culture, Victorian Masculinities, Victorian Sexuality, Victorians and Problem of |  |  |
| FMS 487: Religion and Film |  |  |
| GCU 328: Geography of Middle East and North Africa (SB \& G) |  |  |
| HST 498: AFRICA: Women in Islamic Africa, Segregation-Desegration US Hist \& Law |  |  |
| IAS 401: Sacred Scriptures and Social Choices (HU \& G) |  |  |
| JUS 320: Community and Social Justice (SB \& C) |  |  |
| JUS 352: The Global Politics of Human Rights |  |  |
| JUS 360: Law and Social Control (SB) |  |  |
| JUS 374: The Holocaust, Genocide, and Human Rights |  |  |
| JUS 425: Race, Gender, and Justice ((L or SB) \& C) |  |  |
| JUS 430: Social Protest, Conflict, and Change ( L or SB ) \& C) |  |  |
| JUS 438: Human Differences: Dilemmas of Justice ((L or HU) \& C) |  |  |
| JUS 467: Terrorism, War, and Justice |  |  |
| PGS 350: Social Psychology (SB) |  |  |
| PGS 451: Stereotyping, Prejudice, and Discrimination (L) |  |  |
| PHI 309: Social and Political Philosophy (HU) |  |  |
| REL 320: American Religious Traditions (HU \& C \& H) |  |  |
| REL 321: Religion in America (HU \& C \& H) |  |  |
| REL 323: African American Religion: A Biographical Approach (HU \& C) |  |  |
| REL 326: Latina/o and Latin American Religions and Cultures (HU \& C) |  |  |
| REL 381: Religion and Moral Issues (L or $\mathrm{HU})$ |  |  |
| REL 420: Religion in American Life and Thought (HU) |  |  |

SOC 341: Modern Social Problems (SB)
SOC 457: Global Social Movements (SB \& G)
SSH 400: Poverty, Social Justice, and Global
Health $((\mathrm{L}$ or SB) \& G)
SWU 374: Diversity and Oppression in a
Social Work Context (C)
THP 482: Theatre for Social Change (C)
WST 375: Women \& Social Change (SB \&
C) C)

WST 475: Women of the Diaspora across Cultures (HU)
History and Society Track
JST 210: Introduction to Judaism ((L or HU )\& H)

JST 230: Intro to Jewish Civilization
JST 491: History of Anti-Semitism
HST 211: American Jewish History (SB \& H)
HST 294: Introduction to Jewish Civilization
HST 300: Africa: Slavery and the Internal
African Diaspora, Asia: Modern South Asia, Europe: Birth of the Modern, Europe: Europe and Africa, Europe: France and WW II,
Europe: Revolutionary Paris, Europe: Russian Revolution, Europe: The Holocaust,
Europe:Violence,Death\&Destruction Early
Eur, Europe:When Sources Lie, French
Revolution, Historical Inquiry, Salem Witch
Trials, U.S.: 1920s: American Modernity,
U.S.: 19th/20th C. Immigration Experience,
U.S.: American History, American Memory,
U.S.: Civil War and Reconstruction, U.S.: Indian Wars and Treaties, U.S.: Overland
Trails, U.S.: The American Metropolis, U.S.:
U.S. West and the Environmen, U.S.:African

Amer Vernacular History, U.S: American
Memory: Civil War and Reconstruction
HST 304: Barbarians in Dark Ages, Britain and New Imperialism, Creation and
Destruction, End of Roman Republic, Engl
Middle Ages 1471-1529, European
Enlightenment, European Migrations, History
of Jewish Mysticism, King Alfred: Man or
Myth?, Medieval England 1216-1399, Middle
Ages Recyc: Medievalism, Occup and Collab
w/Europe, Pausanias: Trvlr in Roman,
Religion/Rblln:SE Englnd,
Rockers/Rebels/Romantics, Scottish History,
Shakespeare and the Virgin Queen, Studies in
European History, Survey Eng
Literature\&Culture Cambridge Connection
HST 358: Jewish History from the Bible to 1492 (SB \& H)

HST 359: Jewish History from 1492 to 1948 (SB \& G \& H)

HST 372: Modern Middle East (SB \& G \& H)

FLA 394: History of Zionism, Israeli Cinema
HEB 394: History of Israel: Society, Politics, Culture

JUS 452: Justice Issues in Israel and
Palestine: The Political is Personal
FMS 486: Holocaust on Film
ENG 494: Holocaust and German Media
HST 498: EUROPE: Jews of the Middle Ages

## Capstone Course

JST 491: History of Anti-Semitism
JST 495: Judaism, Science and World Religions

JST 496: Biblical Narratives: Literary Approaches

Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.A A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. $\hat{A}$ At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement.A Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Justice Studies, BA

College of Liberal Arts and Sciences
Campus:Tempe
LAJUSBA

| Term 1 0-14 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement into a mathematics course <br> - Justice Studies BA students are required to complete MAT 142: College Mathematics or higher <br> - All freshmen are required to pass a First-Year Seminar and/or an academic success class and therefore must enroll in an Academic Success Cluster <br> - Scholarship students may need to take additional credits if required to complete a certain amount of credits each term |
| 4 JUS 105: Introduction to Justice Studies (SB) | 3 | C |  |
| JUS 191: First-Year Seminar OR <br> LIA 194: Academic Success Seminar, Intro to Liberal Arts and Sciences, Introduction to <br> Liberal Arts and Sciences Online | 1 |  |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |


| Term 2 15-30 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| JUS Elective | 3 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Elective | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-44 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |

ENG 215: Strategies of Academic Writing (L) OR
ENG 216: Persuasive Writing on Public Issues (L) OR
ENG 217: Writing Reflective Essays (L) OR
ENG 218: Writing About Literature (L or HU) OR
ENG 301: Writing for the Professions (L)
Second Language: Requirement satisfied through the following:

* Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV
Natural Science - Quantitative (SQ) 4
Computer/Statistics/Quantitative Applications (CS)
3
Complete Mathematics (MA) requirement.
4 Complete First-Year Composition requirement.
Minimum 2.50 GPA ASU Cumulative.
- Completing one of the following courses is critical at end of Term
4: ENG 215 Strategies of Academic Writing (L) OR ENG 216 Persuasive Writing on Public Issues (L) OR ENG 217 Writing Reflective Essays (L) OR ENG 218 Writing About Literature (L) OR ENG 301 Writing for the Professions (L)
- Upper Division Related Field or Discipline Specific Focus courses should be selected in consultation with the Justice Studies academic advising staff; minimum grade of C required


## Minimum

| Term 4 45-60 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4. JUS 301: Research in Justice Studies (SB) | 3 | C | - Completing one of the following courses is critical at end of Term 4: ENG 215 Strategies of Academic Writing (L) OR ENG 216 Persuasive Writing on Public Issues (L) OR ENG 217 Writing Reflective Essays (L) OR ENG 218 Writing About Literature (L) OR ENG 301 Writing for the Professions (L) <br> - Upper Division Related Field or Discipline Specific Focus courses should be selected in consultation with the Justice Studies academic advising staff; minimum grade of C required <br> Notes <br> - 24 credit hours completed and 2.00 ASU cumulative GPA required to enroll in JUS 300-level elective courses <br> - Upper Division Related Field or Discipline Specific Focus courses should be selected in consultation with the Justice Studies academic advising staff; minimum grade of C required <br> - University Awareness Area courses (C,G,H) may be satisfiec by completing other university, college, and major requirements |
| 4 JUS 303: Justice Theory | 3 | C |  |
| Upper Division JUS Related Area or Discipline Specific Focus course | 3 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| 1. Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 61-76 Credit Hours Critical course signified by | Hours | Minimum Grade |  |
| JUS 3** Elective | 3 | C |  |
| JUS 3** Elective | 3 | C |  |
| Upper Division JUS Related Area or Discipline Specific Focus course | 3 | C |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 6 77-91 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| JUS 4** Elective AND <br> Literacy and Critical Inquiry (L) | 3 | C | - 24 credit hours completed and 2.00 ASU cumulative GPA required to enroll in JUS 300-level elective courses <br> - Upper Division Related Field or Discipline Specific Focus courses should be selected in consultation with the Justice Studies academic advising staff; minimum grade of C required <br> - University Awareness Area courses (C,G,H) may be satisfiec by completing other university, college, and major requirements |
| Upper Division JUS Related Area or Discipline Specific Focus course | 3 | C |  |
| Humanities, Fine Arts and Design (HU) OR Social and Behavioral Sciences (SB) | 3 |  |  |
| Global Awareness (G) | 3 |  |  |
| Elective | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |


| Term 7 92-105 Credit Hours | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: |
| JUS 4** Elective | 6 | C | - 36 credit hours completed and 2.00 ASU cumulative GPA required to enroll in JUS 300-level elective courses <br> - Upper Division Related Field or Discipline Specific Focus courses should be selected in consultation with the Justice Studies academic advising staff; minimum grade of C required <br> - University Awareness Area courses (C,G,H) may be satisfiec by completing other university, college, and major requirements |
| Upper Division JUS Related Area or Discipline Specific Focus course | 3 | C |  |
| Historical Awareness (H) | 3 |  |  |
| Elective | 2 |  |  |
| Term hours subtotal: | 14 |  |  |


| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| JUS 410: Punishment: Logic and Approach OR <br> JUS 430: Social Protest, Conflict, and Change ((L or SB) \& C) OR <br> JUS 435: Cinema and Justice OR <br> JUS 452: Justice Issues in Israel and Palestine: The Political is Personal OR <br> JUS 474: Legislation of Morality ((L or SB) \& C) OR <br> JUS 494: Relig,Violence \& Conflt Res OR <br> REL 494: Religion, Violence, and Conflict Resolution | 3 | C | - 36 credit hours completed and 2.50 ASU cumulative GPA required to enroll in JUS 400 -level elective courses |
| JUS 484: Internship OR Upper Division Elective | 3 |  |  |
| Complete 2 courses: <br> Upper Division Elective | 6 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |


| JUS Discipline Specific Focus Course | JUS Related Area Course |
| :---: | :---: |
| AFR/ AFS - African American Studies | Citizen, Migration, and Human Rights |
| AIS - American Indian Studies | Globalization, Sustainability, and Economic Justice |
| ASB/ ASM - Anthropology |  |
| ARS - Art History | Law, Policy, and Social Change |
| ARS Art History | Media, Technology, and Culture |
| APA - Asian Pacific American Studies | Social Identities and Communities |
| CED/ FAS - Child Development/ Family Studies |  |
| COM - Communication |  |
| DAH - Dance History |  |
| ECN - Economics |  |
| ENG - English Literature |  |
| FMS - Film and Media Studies |  |
| GCU/ GPH - Geography |  |
| SGS - Global Studies |  |
| HST - History |  |

Language Literature, i.e., SPA, FRE, GER,
etc.
MHL - Music History
PHI - Philosophy
POS - Political Science
PGS/ PSY - Psychology
REL - Religion
SOC - Sociology
THE - Theatre
TCL - Transborder Chicana/ Chicano and
Latina/ Latino Studies
WSH/ WST - Women and Gender Studies

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. A Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. At the far right side of the list, you will see which of the three science and society learning goals are filled by
individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement.Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Justice Studies, BS

College of Liberal Arts and Sciences
Campus:Online, Tempe
LAJUSBS

| Term 1 0-13 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement into a mathematics course <br> - Justice Studies BS students are required to complete MAT 142: College Mathematics or higher as a prerequisite for JUS 302: Basic Statistical Analysis in Justice Studies <br> - All freshmen are required to pass a First-Year Seminar and/or an academic success class and therefore must enroll in an Academic Success Cluster <br> - Scholarship students may need to take additional credits if required to complete a certain amount of credits each term |
| 4. JUS 105: Introduction to Justice Studies (SB) | 3 | C |  |
| LIA 194: Academic Success Seminar, Intro to Liberal Arts and Sciences, Introduction to Liberal Arts and Sciences Online OR <br> JUS 191: First-Year Seminar | 1 |  |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Elective | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 2 14-29 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| JUS Elective | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Elective | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 30-45 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |

ENG 215: Strategies of Academic Writing (L) OR
ENG 216: Persuasive Writing on Public Issues (L) OR
ENG 217: Writing Reflective Essays (L) OR
ENG 218: Writing About Literature (L or HU) OR
ENG 301: Writing for the Professions (L)
Natural Science - Quantitative (SQ) OR 4
Natural Science - General (SG) 4

Upper Division JUS Related Area or Discipline Specific Focus course 3
Complete 2 courses:
6

## Elective

Complete First-Year Composition requirement.
Complete Mathematics (MA) requirement.
Minimum 2.50 GPA ASU Cumulative.

- Completing one of the following courses is critical at end of Term 4: ENG 215 Strategies of Academic Writing (L) OR ENG 216 Persuasive Writing on Public Issues (L) OR ENG 217 Writing Reflective Essays (L) OR ENG 218 Writing About Literature (L) OR ENG 301 Writing for the Professions (L)
- Upper Division Related Field or Discipline Specific Focus courses should be selected in consultation with the Justice Studies academic advising staff; minimum grade of C required.
- Students are encouraged to complete one or two courses from JUS Core: JUS 301, JUS 302, and JUS 303 in Term 3.


| Term 5 61-75 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| JUS 3** Elective | 3 | C | - 24 credit hours completed and 2.00 ASU cumulative GPA required to enroll in JUS 300-level elective courses <br> - Upper Division Related Field or Discipline Specific Focus courses should be selected in consultation with the Justice Studies academic advising staff; minimum grade of C required <br> - University Awareness Area courses (C,G,H) may be satisfiec by completing other university, college, and major requirements |
| Upper Division JUS Related Area or Discipline Specific Focus course | 3 | C |  |
| Global Awareness (G) | 3 |  |  |
| CLAS Science and Society Elective | 3 | C |  |
| Elective | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |


| Term 6 76-90 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| JUS 3** Elective | 3 | C | - 24 credit hours completed and 2.00 ASU cumulative GPA required to enroll in JUS 300-level elective courses <br> - Upper Division Related Field or Discipline Specific Focus courses should be selected in consultation with the Justice Studies academic advising staff; minimum grade of C required <br> - University Awareness Area courses (C,G,H) may be satisfiec by completing other university, college, and major requirements |
| Upper Division JUS Related Area or Discipline Specific Focus course | 3 | C |  |
| Upper Division CLAS Science and Society Elective | 3 | C |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Elective | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |


| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Complete 2 courses: <br> JUS 4** Elective | 6 | C | - 36 credit hours completed and 2.50 ASU cumulative GPA required to enroll in JUS 400-level elective courses <br> - Upper Division Related Field or Discipline Specific Focus courses should be selected in consultation with the Justice Studies academic advising staff; minimum grade of C required |
| Upper Division JUS Related Area or Discipline Specific Focus course | 3 | C |  |
| Complete 2 courses: <br> Elective | 6 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |


| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| JUS 4** Elective | 3 | C | - 36 credit hours completed and 2.50 ASU cumulative GPA required to enroll in JUS 400-level elective courses |
| JUS 484: Internship OR Upper Division Elective | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective | 6 |  |  |
| Elective | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
|  | 15 |  |  |

- A minimum of four courses/12 upper division ( 300 or 400 level) hours are required; selected in consultation with the Justice Studies academic advising staff; minimum grade of C required. While the Bachelor of Science in Justice Studies is a broad-based curriculum, the Justice Studies faculty require develop an academic emphasis outside the major. Students have two options to fulfill this requirement: Related Field (RF) or Discipline Specific Focus (DSF).
- Courses used for the Related Field or Discipline Specific Focus cannot be double-counted with the major (JUS), University General Studies, or Science \& Society requirements. However, to encourage students to pursue a minor, concentration or concurrent major, students will be allowed to double-count the RF or DSF courses with a minor, concentration or concurrent major.

| JUS Related Area Course | JUS Discipline Specific Focus Course |
| :---: | :---: |
| Citizen, Migration, and Human Rights | Upper Division AFR/AFS - African and African American Studies |
| Citizen, Migration, and Human Rights |  |
| Globalization, Sustainability, and Economic | Upper Division AIS - American Indian Studies |
| Justice | Upper Division ASB/ASM - Anthropology |
| Globalization, Sustainability, and Economic Justice |  |
|  | Upper Division ARS - Art History |
| Law, Policy, and Social Change | Upper Division APA - Asian Pacific American Studies |
| Law, Policy, and Social Change |  |
| Media, Technology, and Culture | Upper Division CED/FAS - Child Development/Family Studies |
| Media, Technology, and Culture | Upper Division COM - Human Communication |
| Social Identities and Communities |  |
|  | Upper Division DAH - Dance History |
|  | Upper Division ECN - Economics |
|  | Upper Division ENG - English Literature |
|  | Upper Division FMS - Film and Media Studies |
|  | Upper Division GCU/GPH - Geography |
|  | Upper Division SGS - Global Studies |
|  | Upper Division HST - History |
|  | Upper Division Language Literature - i.e. Spanish, French, German, etc. |
|  | Upper Division MHL - Music HIstory |
|  | Upper Division PHI - Philosophy |
|  | Upper Division POS - Political Science |
|  | Upper Division PGS/PSY - Psychology |
|  | Upper Division REL - Religious Studies |
|  | Upper Division SOC - Sociology |
|  | Upper Division THE - Theater Appreciation |
|  | Upper Division TCL - Transborder, Chicana/o, Latina/o Studies |
|  | Upper Division WSH/WST - Women \& Gender Studies |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. A At least one of the two courses taken from the list must be upper division.A Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement.Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Mathematics, BA

College of Liberal Arts and Sciences
Campus:Tempe
LAMATBA
$\left.\begin{array}{ll|l|l}\text { Term 1 } 10 \text { - } 15 \text { Credit Hours Critical course signified by }\end{array}\right)$

| Term 2 16-32 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CSE 100: Principles of Programming with C++ (CS) OR CSE 110: Principles of Programming with Java (CS) | 3 | C | - Taking CSE 110 will allow the computer science requirement to be completed for the BA in Matr or to continue on with the computer science requirement needed for the BS in Math degree. <br> - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. |
| 4 MAT 271: Calculus with Analytic Geometry II (MA) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4-5 | C |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Maintain 2.80 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 17-18 |  |  |
| Term 3 33-45 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| 4. MAT 272: Calculus with Analytic Geometry III (MA) | 4 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4-5 | C |  |
| Elective | 2 |  |  |
| Maintain 2.80 GPA in Critical Tracking Courses. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 13-14 |  |  |
| Term 4 46-62 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| MAT 243: Discrete Mathematical Structures OR MAT 300: Mathematical Structures (L) | 3 | C | - PHY 121/122 (SQ) advised for Natural Sciences requirement; |
| MAT 342: Linear Algebra OR MAT 343: Applied Linear Algebra | 3 | C | Natural Sciences requirement; also fulfills Related Field area. |
| Natural Science - Quantitative (SQ) | 4 |  | - Minimum grade of C required in all MAT and STP classes; grade |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  | of B or better strongly correlated with timely graduation. |


| Maintain 2.80 GPA in Critical Tracking Courses. |  |  |  |
| :---: | :---: | :---: | :---: |
| Term hours subtotal: | 17-18 |  |  |
| Term 5 63-78 Credit Hours | Hours | Minimum Grade | Notes |
| MAT 370: Intermediate Calculus OR MAT 371: Advanced Calculus I | 3 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. <br> - Second Language requirement completed. |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 79-93 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> Upper Division MAT or STP Additional Course | 6 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. |
| Related Area Course | 3 | C |  |
| MAT 300: Mathematical Structures (L) OR Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR <br> Upper Division Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Upper Division Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) OR Upper Division Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR <br> Upper Division Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Upper Division Social and Behavioral Sciences (SB) AND Historical Awareness (H) |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> Upper Division Related Area Course | 6 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. |
| Upper Division MAT or STP Additional Course | 3 | C |  |
| Upper Division Elective | 6 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| Upper Division MAT or STP Additional Course | 3 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. |
| Upper Division Related Area Course | 3 | C |  |
| Complete 2 courses: Upper Division Elective | 6 |  |  |

Second Language: Requirement satisfied through the following:

* Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV
OR
Elective
Maintain 2.80 GPA in Critical Tracking Courses.
- If MAT 243 is taken during semester 4, an Upper Division Literacy ( L ) must be taken in semester 6.

| MAT/STP Additional Course | Related Field |
| :---: | :---: |
| MAT 243: Discrete Mathematical Structures | AST Upper Division Elective |
| MAT 274: Elementary Differential Equations (MA) | BME Upper Division Elective |
|  | BCH 4** Elective |
| MAT 275: Modern Differential Equations (MA) | CHE Elective |
| MAT Upper Division Elective | CHM 341: Elementary Physical Chemistry |
| STP 326: Intermediate Probability (CS) | CHM 343: Physical Chemistry Laboratory |
| STP 4** Elective | CHM 345: Physical Chemistry I |
|  | CHM 346: Physical Chemistry II |


| CHM 348: Physical Chemistry Laboratory I (L) |
| :---: |
| CHM 349: Physical Chemistry Laboratory II (L) |
| CHM 453: Inorganic Chemistry |
| CHM 460: Biological Chemistry |
| CHM 471: Solid-State Chemistry |
| CEE Upper Division Elective |
| CIS 2** Elective |
| CIS Upper Division Elective |
| CSE Elective |
| ECN 312: Intermediate Microeconomic Theory (SB) |
| ECN 313: Intermediate Macroeconomic Theory (SB) |
| ECN 480: Introduction to Econometrics |
| ECN 485: Mathematical Economics |
| EEE Elective |
| FIN Upper Division Elective |
| GLG 418: Geophysics |
| GLG 419: Geodynamics |
| GLG 470: Hydrogeology |
| GLG 481: Geochemistry |
| IEE Upper Division Elective |
| MSE Elective |
| MAT Upper Division Elective |
| MAE Elective |
| PHI 333: Introduction to Symbolic Logic |
| PHY 121: University Physics I: Mechanics (SQ) |
| PHY 122: University Physics Laboratory I (SQ) |
| PHY 131: University Physics II: Electricity and Magnetism (SQ) |
| PHY 132: University Physics Laboratory II (SQ) |
| PHY 150: Physics I (SQ) |
| PHY 151: Physics II (SQ) |
| PHY 2** Elective |
| PHY Upper Division Elective |
| STP Upper Division Elective |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. A At least one of the two courses taken from the list must be upper division.Â Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.
- For a detailed list of courses applicable to the major (i.e. additional, depth, advanced requirements and related field coursework), please refer to the following website: http://math.asu.edu/undergraduate/ba_Math.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Mathematics, BS

College of Liberal Arts and Sciences
Campus:Tempe
LAMATBS

| Term 1 0-14 Credit Hours Critical course signified by 9 |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 4 MAT 270: Calculus with Analytic Geometry I (MA) |  | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman student <br> - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Elective |  | 6 |  |  |
| LIA 194: Intro to Liberal Arts and Sciences OR MAT 191: First-Year Seminar |  | 1 |  |  |
| Maintain 3.00 GPA in Critical Tracking Courses. |  |  |  |  |
|  | Term hours subtotal: | 14 |  |  |


| Term 2 15-30 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 CSE 110: Principles of Programming with Java (CS) | 3 | C | - CSE 110 will complete the Computer Science (CS) requirement and will count towards the Related Field area. <br> - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. |
| 4 MAT 271: Calculus with Analytic Geometry II (MA) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Elective | 3 |  |  |
| Maintain 3.00 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-46 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 4 CSE 205: Object-Oriented Programming and Data Structures (CS) | 3 | C | - CSE 110 is the direct prerequisite to CSE 205 |
| 4 MAT 272: Calculus with Analytic Geometry III (MA) | 4 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Elective | 3 |  |  |
| Maintain 3.00 GPA in Critical Tracking Courses. |  |  |  |

Term hours subtotal: 16

| Term 4 47-62 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MAT 300: Mathematical Structures (L) | 3 | C | - PHY 121/122 (SQ) advised for Natural Science Requirement; also fulfills Related Field. <br> - Minimum cumulative 3.0 GPA in all critical courses. |
| MAT 342: Linear Algebra OR MAT 343: Applied Linear Algebra | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |

- Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation.

| Term 5 63-78 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MAT 371: Advanced Calculus I | 3 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. |
| Upper Division Additional Course | 3 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 79-93 Credit Hours | Hours | Minimum Grade | Notes |
| Upper Division Depth Course | 3 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. |
| Upper Division Additional Course | 3 | C |  |
| Upper Division Related Area Course | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR <br> Upper Division Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Upper Division Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Upper Division CLAS Science and Society Elective | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours | Hours | Minimum Grade | Notes |
| Upper Division Depth Course | 3 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. |
| Upper Division Advanced Course | 3 | C |  |
| Upper Division Related Area Course | 3-0 | C |  |
| Complete 2 courses: Elective | 6 |  |  |
| Term hours subtotal: | 15-12 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| Upper Division Advanced Course | 3 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. |
| Upper Division Additional Course | 3 | C |  |
| Elective | 5 |  |  |
| Lower Division Related Area Course | 1-4 | C |  |
| Term hours subtotal: | 12-15 |  |  |


| Related Field | Depth Courses | Additional Courses |
| :---: | :---: | :---: |
| AST Upper Division Elective | MAT 415: Introduction to Combinatorics | MAT 243: Discrete Mathematical Structures |
| BME Upper Division Elective | MAT 416: Introduction to Graph Theory | MAT 274: Elementary Differential Equations (MA) |
| BCH 4** Elective | MAT 423: Numerical Analysis I (CS) |  |
| CHE Elective | MAT 425: Numerical Analysis II (CS) | MAT 275: Modern Differential Equations (MA) |
| CHM 341: Elementary Physical Chemistry | MAT 442: Advanced Linear Algebra | MAT 3** Elective |
| CHM 343: Physical Chemistry Laboratory | MAT 444: Intermediate Abstract Algebra | MAT 4** Elective |
| CHM 345: Physical Chemistry I | MAT 472: Intermediate Real Analysis I | STP 4** Elective |
| CHM 346: Physical Chemistry II | MAT 473: Intermediate Real Analysis II |  |
| CHM 348: Physical Chemistry Laboratory I (L) | MAT 475: Differential Equations |  |
| CHM 349: Physical Chemistry Laboratory II (L) | MAT 476: Partial Differential Equations STP 421: Probability |  |


| CHM 453: Inorganic Chemistry |
| :---: |
| CHM 460: Biological Chemistry |
| CHM 471: Solid-State Chemistry |
| CEE Upper Division Elective |
| CIS 2** Elective |
| CIS Upper Division Elective |
| CSE Elective |
| ECN 312: Intermediate Microeconomic Theory (SB) |
| ECN 313: Intermediate Macroeconomic Theory (SB) |
| ECN 480: Introduction to Econometrics |
| ECN 485: Mathematical Economics |
| EEE Elective |
| FIN Upper Division Elective |
| GLG 418: Geophysics |
| GLG 419: Geodynamics |
| GLG 470: Hydrogeology |
| GLG 481: Geochemistry |
| IEE Upper Division Elective |
| MSE Elective |
| MAT Upper Division Elective |
| MAE Elective |
| PHI 333: Introduction to Symbolic Logic |
| PHY 121: University Physics I: Mechanics (SQ) |
| PHY 122: University Physics Laboratory I (SQ) |
| PHY 131: University Physics II: Electricity and Magnetism (SQ) |
| PHY 132: University Physics Laboratory II (SQ) |
| PHY 150: Physics I (SQ) |
| PHY 151: Physics II (SQ) |
| PHY 2** Elective |
| PHY Upper Division Elective |
| STP Upper Division Elective |
| Advanced Courses |
| MAT 372: Advanced Calculus II |
| MAT 410: Introduction to General Topology |
| MAT 415: Introduction to Combinatorics |
| MAT 416: Introduction to Graph Theory |
| MAT 419: Introduction to Linear Optimization (CS) |
| MAT 420: Scientific Computing |
| MAT 421: Applied Computational Methods (CS) |
| MAT 423: Numerical Analysis I (CS) |
| MAT 425: Numerical Analysis II (CS) |
| MAT 442: Advanced Linear Algebra |


| MAT 443: Introduction to Abstract Algebra |
| :---: |
| MAT 444: Intermediate Abstract Algebra |
| MAT 445: Theory of Numbers |
| MAT 451: Mathematical Modeling (CS) |
| MAT 452: Introduction to Chaos and Nonlinear Dynamics |
| MAT 461: Applied Complex Analysis |
| MAT 462: Applied Partial Differential Equations |
| MAT 472: Intermediate Real Analysis I |
| MAT 475: Differential Equations |
| MAT 476: Partial Differential Equations |
| STP 420: Introductory Applied Statistics (CS) |
| STP 421: Probability |
| STP 425: Stochastic Processes |
| STP 427: Mathematical Statistics |
| STP 429: Experimental Statistics (CS) |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. A Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Mathematics (Statistics), BS

College of Liberal Arts and Sciences
Campus:Tempe
LAMATTBS

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 1 MAT 270: Calculus with Analytic Geometry I (MA) |  | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman student <br> - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences OR First-Year Seminar |  | 1 |  |  |
| Elective |  | 6 |  |  |
| Maintain 2.80 GPA in Critical Tracking Courses. |  |  |  |  |
|  | Term hours subtotal: | 14 |  |  |


| Term 2 15-30 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. CSE 110: Principles of Programming with Java (CS) | 3 | C | - CSE 110 will complete the Computer Science (CS) requirement and will count towards the Related Field area. <br> - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. |
| 4 MAT 271: Calculus with Analytic Geometry II (MA) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |


| Term 3 31-46 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 CSE 205: Object-Oriented Programming and Data Structures (CS) | 3 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. |
| 4 MAT 272: Calculus with Analytic Geometry III (MA) | 4 | C |  |
| 1 STP 420: Introductory Applied Statistics (CS) | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  |  |
| Maintain 2.80 GPA in Critical Tracking Courses. |  |  |  |
| 1. Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 47-62 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| 1. MAT 300: Mathematical Structures (L) | 3 | C | - PHY 121/122 (SQ) advised for Natural Sciences Requirement; also fulfills Related Field area. |
| MAT 342: Linear Algebra OR MAT 343: Applied Linear Algebra | 3 | C |  |


| 1. STP 429: Experimental Statistics (CS) |  |  | 3 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Natural Science - Quantitative (SQ) |  |  | 4 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) |  |  | 3 |  |  |
| Maintain 2.80 GPA in Critical Tracking Courses. |  |  |  |  |  |
|  |  | Term hours subtotal: | 16 |  |  |
| Term 5 63-78 Credit Hours |  |  | Hours | Minimum Grade | Notes |
| MAT 371: Advanced Calculus I |  |  | 3 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. |
| STP 421: Probability |  |  | 3 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) |  |  | 4 |  |  |
| Humanities, Fine Arts and Design (HU) |  |  | 3 |  |  |
| Upper Division CLAS Science and Society Elective |  |  | 3 | C |  |
|  |  | Term hours subtotal: | 16 |  |  |
| Term 6 79-93 Credit Hours |  |  | Hours | Minimum Grade | Notes |
| STP 427: Mathematical Statistics |  |  | 3 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. |
| Upper Division MAT or STP Advanced Cours |  |  | 3 | C |  |
| Upper Division CLAS Science and Society E | ctive |  | 3 | C |  |
| Upper Division Humanities, Fine Arts and D Upper Division Social and Behavioral Sciences | $\begin{aligned} & \operatorname{ign}(\mathrm{HU}) \text { OR } \\ & \mathrm{s} \text { (SB) } \end{aligned}$ |  | 3 |  |  |
| Upper Division Elective |  |  | 3 |  |  |
|  |  | Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours |  |  | Hours | Minimum Grade | Notes |
| Upper Division MAT or STP Advanced Cou MAT 274: Elementary Differential Equation MAT 275: Modern Differential Equations (M |  |  | 3 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. |
| Complete 2 courses: Related Area Course |  |  | 7 | C |  |
| Upper Division Elective |  |  | 3 |  |  |
| Elective |  |  | 2 |  |  |
|  |  | Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours |  |  | Hours | Minimum Grade | Notes |
| Upper Division MAT or STP Advanced Cours |  |  | 3 | C | - Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation. |
| Upper Division Related Area Course |  |  | 3 | C |  |
| Elective |  |  | 6 |  |  |
| Term hours subtotal: |  |  | 12 |  |  |
| MAT or STP Advanced Courses | Related Field |  |  |  |  |
| MAT 274: Elementary Differential Equations (MA) | AST Upper D | Elective |  |  |  |
| MAT 275: Modern Differential Equations (MA) | BME Upper Division Elective |  |  |  |  |
|  | BCH 4** Ele |  |  |  |  |
| MAT 372: Advanced Calculus II | CHE Electiv |  |  |  |  |
| MAT 442: Advanced Linear Algebra | CHM 341: E | ary Physical Chemistry |  |  |  |
| STP 425: Stochastic Processes | CHM 343: P | Chemistry Laboratory |  |  |  |
|  | CHM 345: P | Chemistry I |  |  |  |
|  | CHM 346: P | Chemistry II |  |  |  |
|  | CHM 348: P <br> (L) | Chemistry Laboratory |  |  |  |


| CHM 349: Physical Chemistry Laboratory II (L) |
| :---: |
| CHM 453: Inorganic Chemistry |
| CHM 460: Biological Chemistry |
| CHM 471: Solid-State Chemistry |
| CEE Upper Division Elective |
| CIS 2** Elective |
| CIS Upper Division Elective |
| CSE Elective |
| ECN 312: Intermediate Microeconomic Theory (SB) |
| ECN 313: Intermediate Macroeconomic Theory (SB) |
| ECN 480: Introduction to Econometrics |
| ECN 485: Mathematical Economics |
| EEE Elective |
| FIN Upper Division Elective |
| GLG 418: Geophysics |
| GLG 419: Geodynamics |
| GLG 470: Hydrogeology |
| GLG 481: Geochemistry |
| IEE Upper Division Elective |
| MSE Elective |
| MAT Upper Division Elective |
| MAE Elective |
| PHI 333: Introduction to Symbolic Logic |
| PHY 121: University Physics I: Mechanics (SQ) |
| PHY 122: University Physics Laboratory I (SQ) |
| PHY 131: University Physics II: Electricity and Magnetism (SQ) |
| PHY 132: University Physics Laboratory II (SQ) |
| PHY 150: Physics I (SQ) |
| PHY 151: Physics II (SQ) |
| PHY 2** Elective |
| PHY Upper Division Elective |
| STP Upper Division Elective |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
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- For a detailed list of courses applicable to the major (i.e. additional, depth, advanced requirements and related field coursework), please refer to the following website: http://math.asu.edu/undergraduate/statistics.html.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Microbiology, BS

College of Liberal Arts and Sciences
Campus:Tempe
LAMICBS

| Term 1 0-15 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| BIO 100: The Living World (SQ) OR BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) |  | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - CHM 113 must be completed by end of term 2 <br> - If student tests into MAT 106 then BIO 100 is recommended |
| CHM 113: General Chemistry I (SQ) OR Social and Behavioral Sciences (SB) OR Humanities, Fine Arts and Design (HU) |  | 4-3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| STP 231: Statistics for Life Science (CS) |  | 3 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences |  | 1 |  |  |
|  | Term hours subtotal: | 15-14 |  |  |


| Term 2 16-32 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C | - CHM 116 must be completed by end of term 3 |
| CHM 113: General Chemistry I (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 251: Calculus for Life Sciences (MA) OR MAT 170: Precalculus (MA) | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) OR <br> Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| 4 Complete CHM 113 course(s). |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 3 33-45 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| BIO 181: General Biology I (SQ) OR <br> BIO 182: General Biology II (SG) OR <br> MIC 220: Biology of Microorganisms AND <br> MIC 206: Microbiology Laboratory (SG) | 4 | C | - If CHM 233 and 237 are taken, then CHM 234 and 238 must be taken the following <br> - If CHM 231 and 235 are taken, then BCH 361 and 367 must be taken the following semester |
| CHM 116: General Chemistry II (SQ) OR <br> CHM 233: General Organic Chemistry I AND <br> CHM 237: General Organic Chemistry Laboratory I OR <br> CHM 231: Elementary Organic Chemistry (SQ) AND <br> CHM 235: Elementary Organic Chemistry Laboratory (SQ) | 3 | C |  |
| MAT 251: Calculus for Life Sciences (MA) OR <br> Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR <br> Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 | C |  |
| CLAS Science and Society Elective OR BIO 340: Fundamentals of Genetics | 3-4 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| 4 Complete CHM 116 course(s). |  |  |  |
| Term hours subtotal: | 13-14 |  |  |
| Minimum |  |  |  |


| Term 4 46-62 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4. BIO 340: Fundamentals of Genetics | 4 | C | - If CHM 233 and 237 are taken, then CHM 234 and 238 must be taken the following <br> - If CHM 231 and 235 are taken, then BCH 361 and 367 must be taken the following semester |
| MIC 220: Biology of Microorganisms AND MIC 206: Microbiology Laboratory (SG) | 4 | C |  |
| CHM 234: General Organic Chemistry II AND <br> CHM 238: General Organic Chemistry Laboratory II OR <br> CHM 231: Elementary Organic Chemistry (SQ) AND <br> CHM 235: Elementary Organic Chemistry Laboratory (SQ) OR <br> CHM 233: General Organic Chemistry I AND <br> CHM 237: General Organic Chemistry Laboratory I OR <br> Elective OR <br> BCH 361: Principles of Biochemistry AND <br> BCH 367: Elementary Biochemistry Laboratory | 3-4 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) OR Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 17-18 |  |  |
| Term 5 63-77 Credit Hours | Hours | Minimum Grade | Notes |
| MIC 302: Advanced Bacteriology Laboratory (L) | 2 | C | - If CHM 233 and 237 are taken, then CHM 234 and 238 must be taken the following <br> - If CHM 231 and 235 are taken, then BCH 361 and 367 must be taken the following semester |
| MIC 360: Bacterial Physiology | 3 | C |  |
| PHY 101: Introduction to Physics (SQ) OR <br> PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) | 4 | C |  |
| Upper Division Major Core Elective Course | 3 | C |  |
| Social and Behavioral Sciences (SB) OR <br> Humanities, Fine Arts and Design (HU) OR <br> CHM 234: General Organic Chemistry II AND <br> CHM 238: General Organic Chemistry Laboratory II OR <br> BCH 361: Principles of Biochemistry AND <br> BCH 367: Elementary Biochemistry Laboratory | 3-4 | C |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 6 78-93 Credit Hours | Hours | Minimum Grade | Notes |
| Upper Division Major Core Elective Lab Course | 3-1 | C |  |
| Upper Division Major Microbiology/Immunology Elective Course | 3-4 | C |  |
| PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) OR <br> PHY 101: Introduction to Physics (SQ) OR Elective | 3-4 | C |  |
| BCH 361: Principles of Biochemistry AND BCH 367: Elementary Biochemistry Laboratory | 4 | C |  |
| Upper Division Social and Behavioral Sciences (SB) OR Upper Division Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 7 94-108 Credit Hours | Hours | Minimum Grade | Notes |
| Upper Division Major General Biology Elective Course | 3-4 | C |  |
| Upper Division CLAS Science and Society Elective | 3 | C |  |
| Complete 2 courses: Upper Division Elective | 6 |  |  |
| CLAS Science and Society Elective OR Elective | 3 | C |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| MIC 401: RP:Senior Research Paper (L) | 1 | C |  |
| Upper Division Major Microbiology/ Immunology Elective Course OR Upper Division Major General Biology Elective Course | 2-4 | C |  |
| Upper Division Major Microbiology/ Immunology Elective Course OR Upper Division Major General Biology Elective Course OR Upper Division Elective | 3 | C |  |
| Complete 2 courses: Upper Division Elective | 6 |  |  |
| Term hours subtotal: $\quad 12-14$ <br> Academic Catalog Archive 2011-2012 1334 |  |  |  |

Page 2

| Major General Biology Electives Courses |  | Major Microbiology/Immunology Electives <br> Courses |  |
| :--- | :--- | :--- | :--- |
|  | Major Core Electives Courses |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. A When you complete both courses, all three learning goals must be filled in order to complete the requirement.Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Molecular Biosciences/Biotechnology, BS

College of Liberal Arts and Sciences
Campus:Tempe
LAMBBBS

| Term 1 0-14 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHM 113: General Chemistry I (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - An ASU Math Placement on ALEKS of a 50 or higher is needed to start in CHM 113 |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| STP 231: Statistics for Life Science (CS) | 3 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences | 1 |  |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-30 Credit Hours Critical course signified by 4 | Hours | Minimum Grade | Notes |
| CHM 113: General Chemistry I (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 251: Calculus for Life Sciences (MA) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR <br> Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR <br> Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Elective | 3 |  |  |
| 4 Complete CHM 113 course(s). |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-44 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| CHM 116: General Chemistry II (SQ) OR <br> CHM 231: Elementary Organic Chemistry (SQ) AND <br> CHM 235: Elementary Organic Chemistry Laboratory (SQ) OR <br> CHM 233: General Organic Chemistry I AND <br> CHM 237: General Organic Chemistry Laboratory I | 4 | C |  |
| 4 MBB 245: Principles of Molecular and Cellular Biology I (SQ) | 4 | C |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| CLAS Science and Society Elective | 3 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| 4 Complete CHM 116 course(s). |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 45-59 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 1 MBB 247: Principles of Molecular and Cellular Biology II | 4 | C |  |
| MIC 220: Biology of Microorganisms AND MIC 206: Microbiology Laboratory (SG) | 4 | C |  |

CHM 234: General Organic Chemistry II AND
CHM 238: General Organic Chemistry Laboratory II OR
CHM 231: Elementary Organic Chemistry (SQ) AND
CHM 235: Elementary Organic Chemistry Laboratory (SQ) OR
CHM 233: General Organic Chemistry I AND
CHM 237: General Organic Chemistry Laboratory I
Humanities, Fine Arts and Design (HU) 3
Term hours subtotal: 15

| Term 5 60-74 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| BIO 340: Fundamentals of Genetics | 4 | C |  |
| MBB 343: Genetic Engineering and Society (L) | 4 | C |  |
| PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) | 4 | C |  |
| Upper Division Elective OR <br> CHM 234: General Organic Chemistry II AND <br> CHM 238: General Organic Chemistry Laboratory II | 3-4 | C |  |




## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division.Â Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. Â When you complete both courses, all three learning goals must be filled in order to complete the requirement.Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Philosophy, BA

College of Liberal Arts and Sciences
Campus:Tempe
LAPHIBA

| Term 1 0-16 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| LIA 194: Intro to Liberal Arts and Sciences OR UNI 194: Academic Success Seminar OR First-Year Seminar | 1 |  |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| PHI 103: Principles of Sound Reasoning (L or HU) OR PHI Elective | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Elective | 2 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-30 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 PHI Elective | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 31-46 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| PHI Elective | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Global Awareness (G) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 47-60 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Minimum Grade | Notes |
| 1. PHI 300: Philosophical Argument and Exposition (L) | 3 | C | - PHI 300 is open to Philosophy majors only, student must meet with advisor prior to enrolling |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |


| Term 5 61-75 Credit Hours |  | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| :---: | :---: | :---: | :---: | :---: |
| PHI 301: History of Ancient Philosophy (HU \& H) |  | 3 | C |  |
| PHI 312: Theory of Knowledge (HU) OR <br> PHI 314: Philosophy of Science (HU) OR <br> PHI 315: Philosophy of Language (HU) OR <br> PHI 316: Metaphysics (HU) OR <br> PHI 317: Philosophy of Mind (HU) |  | 3 | C |  |
| PHI 333: Introduction to Symbolic Logic |  | 3 | C |  |
| Complete 2 courses: Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| PHI 302: History of Modern Philosophy (HU \& H) |  | 3 | C |  |
| PHI 312: Theory of Knowledge (HU) OR PHI 314: Philosophy of Science (HU) OR PHI 315: Philosophy of Language (HU) OR PHI 316: Metaphysics (HU) OR PHI 317: Philosophy of Mind (HU) |  | 3 | C |  |
| PHI Elective |  | 3 | C |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| PHI 305: Ethical Theory (HU) OR PHI 335: History of Ethics (HU) |  | 3 | C |  |
| PHI 401: Rationalism OR <br> PHI 402: Empiricism (HU) OR <br> PHI 403: Contemporary Analytic Philosophy (HU) OR <br> PHI 413: Advanced Symbolic Logic OR <br> PHI 420: Topics in Philosophy |  | 3 | C |  |
| PHI Upper Division Elective |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| PHI 401: Rationalism OR <br> PHI 402: Empiricism (HU) OR <br> PHI 403: Contemporary Analytic Philosophy (HU) OR <br> PHI 413: Advanced Symbolic Logic OR <br> PHI 420: Topics in Philosophy |  | 3 | C |  |
| PHI Upper Division Elective |  | 3 | C |  |
| Complete 3 courses: <br> Upper Division Elective |  | 9 |  |  |
|  | Term hours subtotal: | 15 |  |  |

## Notes:

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Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Physics, BA

College of Liberal Arts and Sciences
Campus:Tempe
LAPHYBA

| Term 1 0-15 Credit Hours Critical course signified by ${ }^{\text {! }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 MAT 270: Calculus with Analytic Geometry I (MA) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students <br> - PHY 121/122 and 131/132 may be used in place of PHY 150 and 151 |
| CHM 113: General Chemistry I (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| LIA 194: Academic Success Seminar OR <br> PHY 191: First-Year Seminar | 1 |  |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 15 |  |  |


| Term 2 16-30 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MAT 271: Calculus with Analytic Geometry II (MA) | 4 | C | - PHY 121/122 and 131/132 may be used in place of PHY 150 and 151 |
| 4 PHY 150: Physics I (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| 1 MAT 272: Calculus with Analytic Geometry III (MA) | 4 | C | - PHY 121/122 and 131/132 may be used in place of PHY 150 and 151 |
| 4 PHY 151: Physics II (SQ) | 4 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| 9. Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 46-62 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |


| 252: Physics III (SQ) | 4 | C | - PHY 121/122 and 131/132 may be used in place of PHY 150 and 151 <br> - A grade of C must be earned in the 4th semester language course (usually 202) |
| :---: | :---: | :---: | :---: |
| PHY 201: Mathematical Methods in Physics I (CS) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |


| Term 5 63-78 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| PHY 302: Mathematical Methods in Physics II | 3 | C |  |
| PHY 310: Classical Particles, Fields, and Matter I | 3 | C |  |
| PHY 314: Quantum Physics I | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 79-93 Credit Hours | Hours | Minimum Grade | Notes |
| PHY 311: Classical Particles, Fields, and Matter II | 3 | C | - PHY Breadth Course must be approved by the Physics advisor. |
| Upper Division PHY Breadth Course | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Complete 2 courses: Upper Division Elective | 6 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours | Hours | Minimum Grade | Notes |
| Upper Division PHY Breadth Course | 3 | C | - PHY Breadth Course must be approved by the Physics advisor. |
| Complete 4 courses: <br> Upper Division Elective | 12 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> Upper Division Elective | 6 |  |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Lower Division Elective | 3 |  |  |
| Term hours subtotal: | 12 |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.A A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. Â At least one of the two courses taken from the list must be upper division. A Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. A Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map Physics, BS

College of Liberal Arts and Sciences
Campus:Tempe
LAPHYBS

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 MAT 270: Calculus with Analytic Geometry I (MA) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - All freshman must pass on academic success course and therefore must enroll in an Academic Success Cluster or First Year Seminar |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| LIA 194: Academic Success Seminar OR PHY 191: First-Year Seminar | 1 |  |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-28 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| 4 MAT 271: Calculus with Analytic Geometry II (MA) | 4 | C | - PHY $121 / 122$ and $131 / 132$ may be used in place of PHY 150 and 151 |
| 4 PHY 150: Physics I (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 29-45 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| 4 MAT 272: Calculus with Analytic Geometry III (MA) | 4 | C | - PHY 121/122 and 131/132 may be used in place of PHY 150 and 151 |
| 4 PHY 151: Physics II (SQ) | 4 | C |  |
| CLAS Science and Society Elective | 3 | C |  |
| Elective | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |

Maintain 2.00 GPA in Critical Tracking Courses.
Term hours subtotal: 17

| Term 4 46-61 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 PHY 252: Physics III (SQ) | 4 | C | - PHY 333 is OPTIONAL. <br> Students must choose one of two possible two-course lab sequences: PHY 333 and PHY 334 OR PHY 334 and PHY 465. |
| PHY 201: Mathematical Methods in Physics I (CS) | 3 | C |  |
| PHY 333: Electronic Circuits and Measurements | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Upper Division CLAS Science and Society Elective | 3 | C |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 62-76 Credit Hours | Hours | Minimum Grade | Notes |


| PHY 302: Mathematical Methods in Physics II |  | 3 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| PHY 310: Classical Particles, Fields, and Matter I |  | 3 | C |  |
| PHY 314: Quantum Physics I |  | 3 | C |  |
| Complete 2 courses: Elective |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 77-91 Credit Hours |  | Hours | Minimum Grade | Notes |
| PHY 311: Classical Particles, Fields, and Matter II |  | 3 | C | - PHY 334 is REQUIRED. <br> Students must choose one of two possible two-course lab sequences: PHY 333 and PHY 334 OR PHY 334 and PHY 465. |
| PHY 315: Quantum Physics II |  | 3 | C |  |
| PHY 334: Advanced Laboratory I (L) |  | 3 | C |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 92-106 Credit Hours |  | Hours | Minimum Grade | Notes |
| PHY 412: Classical Particles, Fields, and Matter III OR PHY 416: Quantum Physics III |  | 3 | C |  |
| PHY 441: Statistical and Thermal Physics |  | 3 | C |  |
| Complete 2 courses: Elective |  | 6 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 107-121 Credit Hours |  | Hours | Minimum Grade | Notes |
| PHY 465: Advanced Laboratory II |  | 3 | C | - PHY 465 is OPTIONAL. <br> Students must choose one of two possible two-course lab |
| PHY Upper Division Elective |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 3 |  | sequences: PHY 333 and PHY 334 OR PHY 334 and PHY 465. |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  | - PHY Upper Division Elective needs Physics advisor approval. |
|  | Term hours subtotal: | 15 |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. A At least one of the two courses taken from the list must be upper division.A Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 121
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map <br> Political Science, BA

College of Liberal Arts and Sciences
Campus:Online, Tempe
LAPOSBA

| Term 1 0-14 Credit Hours Critical course signified b | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| POS 110: Government and Politics (SB) OR POS 150: Comparative Government (SB \& G) OR POS 160: Global Politics (SB \& G) | 3 | C | - Choose only 1 course: POS 110, POS 150, or POS 160 for Term 1 <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement into a mathematics course <br> - MAT 142: College Mathematics or higher MA will satisfy requirement <br> - All freshmen are required to pass a First-Year Seminar and/or an academic success class and therefore must enroll in an Academic Success Cluster <br> - Consult with an academic advisor to determine second language proficiency <br> - Scholarship students may need to take additional credits if required to complete a certain amount of credits each term |
| ENG 101 or ENG 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| POS 191: First-Year Seminar | 1 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Term hours subtotal: | 14 |  |  |

$\left.\begin{array}{llll}\text { Term } 2 \text { 2 } 15-28 \text { Credit Hours Critical course signified by }\end{array}\right)$

| Term 4 45-59 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| POS Elective | 3 | C | - Complete all critical courses by the end of Term 4 <br> - Political Science related area course options: AES, AFH, AFR, AFS, AIS, APA, ASB, ASM, COM, ECN, FAS, GCU, GPH, HST, HIS, JUS, MIS, PGS, PHI, PSY, REL, SGS, SOC, TCL, WSH, WST <br> - If Second Language at the 202 is completed, take an elective |
| POS Upper Division Elective | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 3-4 | C |  |
| Related Area Course | 3 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Term hours subtotal: | 15-16 |  |  |
|  |  |  |  |
| Term 5 60-75 Credit Hours | Hours | Minimum Grade | Notes |
| POS 301: Empirical Political Inquiry (SB) | 3 | C | - Political Science related area course options: AES, AFH, AFR, AFS, AIS, APA, ASB, ASM, COM, ECN, FAS, GCU, GPH, HST, HIS, JUS, MIS, PGS, PHI, PSY, REL, SGS, SOC, TCL, WSH, WST <br> - If Literacy and Critical Inquiry (L) is completed, take an elective |
| Related Area Course | 6 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| $\begin{aligned} & \text { Natural Science - Quantitative (SQ) OR } \\ & \text { Natural Science - General (SG) } \end{aligned}$ | 4 |  |  |
| Term hours subtotal: | 16 |  |  |
|  |  |  |  |


| Term 6 76-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| POS Upper Division Elective |  | 3 | C | - Political Science related area course options: AES, AFH, AFR, AFS, AIS, APA, ASB, ASM, COM, ECN, FAS, GCU, GPH, HST, HIS, JUS, MIS, PGS, PHI, PSY, REL, SGS, SOC, TCL, WSH, WST <br> If 45 hours upper-division coursework has been satisfied then the general electives can be upper or lower division |
| POS 484: Internship OR POS Upper Division Elective |  | 3 | C |  |
| Related Area Course |  | 3 | C |  |
| Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |


| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| POS Upper Division Elective |  | 3 | C | - If Cultural Diversity in the U.S. (C) requirement is completed, take an elective <br> - If Upper-Division Literacy and Critical Inquiry (L) requirement is completed, take an Upper-Division general elective <br> - If 45 hours upper-division coursework has been satisfied then the general electives can be upper or lower division <br> - There is room in one's program of study for a concurrent degree, minor, or certificate |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |


| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Upper Division Elective |  | 15 |  | - If 45 hours upper-division coursework has been satisfied then the general electives can be upper or lower division <br> - There is room in one's program of study for a concurrent degree, minor, or certificate |
|  | Term hours subtotal: | 15 |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. A Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> Political Science, BS

College of Liberal Arts and Sciences
Campus:Online, Tempe
LAPOSBS

| Term 1 0-13 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| POS 110: Government and Politics (SB) OR <br> POS 150: Comparative Government (SB \& G) OR POS 160: Global Politics (SB \& G) |  | 3 | C | - Choose only 1 course: POS 110, POS 150, or POS 160 for Term 1 <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement into a mathematics course <br> - MAT 142: College Mathematics or higher MA will satisfy requirement <br> - All freshmen are required to pass a First-Year Seminar and/or an academic success class and therefore must enroll in an Academic Success Cluster <br> - Scholarship students may need to take additional credits if required to complete a certain amount of credits each term |
| ENG 101 or ENG 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| MAT 142: College Mathematics (MA) |  | 3 | C |  |
| POS 191: First-Year Seminar |  | 1 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 13 |  |  |


| Term 2 14-29 Credit Hours Critical course signified by ${ }^{(1)}$ |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| POS 110: Government and Politics (SB) AND <br> POS 150: Comparative Government (SB \& G) OR POS 160: Global Politics (SB \& G) |  | 3 | C | - If POS 110 has been completed, choose 1 course: POS 150 or POS 160 for Term 2; If POS 150 or POS 160 has been completed, POS 110 must be taken in Term 2. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Related Area Course |  | 3 | C |  |
| Natural Science - Quantitative (SQ) |  | 4 |  | - Political Science related area course options: AES, AFH, |
| Elective |  | 3 |  | AFR, AFS, AIS, APA, ASB, |
|  | Term hours subtotal: | 16 |  | ASM, COM, ECN, FAS, GCU, GPH, HST, HIS, JUS, MIS, PGS, PHI, PSY, REL, SGS, SOC, TCL, WSH, WST |


| Term 3 30-44 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 POS 210: Political Ideologies (SB) | 3 | C | - Political Science related area course options: AES, AFH, AFR, AFS, AIS, APA, ASB, ASM, COM, ECN, FAS, GCU, GPH, HST, HIS, JUS, MIS, PGS, PHI, PSY, REL, SGS, SOC, TCL, WSH, WST |
| POS Elective | 3 | C |  |
| Related Area Course | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Elective | 3 |  |  |
| 4. Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 45-60 Credit Hours | Hours | Minimum Grade | Notes |
| POS Elective | 3 | C |  |


| Related Area Course | 6 | C |
| :--- | :---: | :---: |
| Humanities, Fine Arts and Design (HU) | 3 |  |
| Natural Science - Quantitative (SQ) OR |  | 4 |
| Natural Science - General (SG) | Term hours subtotal: | 16 |

- Complete all critical courses by the end of Term 4
- Political Science related area course options: AES, AFH, AFR, AFS, AIS, APA, ASB, ASM, COM, ECN, FAS, GCU, GPH, HST, HIS, JUS, MIS, PGS, PHI, PSY, REL, SGS, SOC, TCL, WSH, WST

| Term 5 61-75 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| POS 301: Empirical Political Inquiry (SB) |  | 3 | C | - If Literacy and Critical Inquiry (L) requirement is completed, take a general elective <br> - See Notes below regarding CLAS Science and Society requirements and website |
| POS Upper Division Elective |  | 3 | C |  |
| Upper Division CLAS Science and Society Elective |  | 3 | C |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| POS 401: Political Statistics (CS) |  | 3 | C | - See Notes below regarding CLAS Science and Society requirements and website |
| POS Upper Division Elective |  | 3 | C |  |
| POS 484: Internship OR POS Upper Division Elective |  | 3 | C |  |
| Upper Division CLAS Science and Society Elective |  | 3 | C |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| POS Upper Division Elective |  | 3 | C | - If Cultural Diversity in the U.S. (C) requirement is completed, take an elective <br> - If Upper-Division Literacy and Critical Inquiry (L) requirement is completed, take an Upper-Division general elective <br> - If 45 hours upper-division coursework has been satisfied then the general electives can be upper or lower division <br> - There is room in one's program of study for a concurrent degree, minor, or certificate |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |


| Term 8 | $106-120$ Credit Hours | Hours | Minimum <br> Grade | Notes |
| :--- | :--- | :---: | :---: | :---: |
| POS Upper Division Elective | 3 | C |  |  |
| Upper Division Elective |  | 9 |  | - If 45 hours upper-division |
| coursework has been satisfied |  |  |  |  |
| then the general electives can be |  |  |  |  |
| upper or lower division |  |  |  |  |

[^20]202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.

- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. $\hat{A}$ At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Psychology, BA

College of Liberal Arts and Sciences
Campus:Tempe
LAPGSBA

| Term 1 0-14 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into First-Year Composition courses. <br> - The Math Placement Exam score determines placement into Math. <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. LIA 194 or a 191 level course offered by the College of Liberal Arts and Sciences. <br> - Languages offered: http://silc.asu.edu/languages |
| 4 MAT 170: Precalculus (MA) | 3 | C |  |
| 4 PGS 101: Introduction to Psychology (SB) | 3 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences OR First-Year Seminar | 1 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-30 Credit Hours Critical course signified by | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - If the FYC requirement is completed - PGS/PSY course (NOT PGS 194, PGS 270) or a University Elective. See Note 4 below in Additional Notes concerning Additional Psychology Courses: <br> - MAT 170 must be completed by the end of Term 2. If MAT 170 is completed: University Elective. <br> - If Second Language requirement is completed - University Elective. <br> - See Note 1 below in additional notes concerning Foundations of Behavior. |
| MAT 170: Precalculus (MA) OR Elective | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Elective | 3 |  |  |
| Humanities, Fine Arts and Design (HU) OR Cultural Diversity in the U.S. (C) OR Global Awareness (G) OR Historical Awareness (H) OR Foundations of Behavior Course | 3 | C |  |
| Term hours subtotal: | 16 |  |  |


| Term 3 31-44 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. PSY 230: Introduction to Statistics (CS) | 3 | C | - First Year Composition must be completed by end of Term 3. If the FYC requirement is completed - PGS/PSY courses (NOT PGS 194, PGS 270) or a University elective. Se Note 4 below in additional notes concerning Additional Psychology Courses. <br> - If the Second Language requirement is complete University elective. |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Humanities, Fine Arts and Design (HU) OR Cultural Diversity in the U.S. (C) OR <br> Global Awareness (G) OR <br> Historical Awareness (H) OR <br> Foundations of Behavior Course | 3 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 45-59 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| 4 PSY 290: Research Methods (L or SG) | 4 | C | - If the Second Language requirement is complete University Elective. |

Second Language: Requirement satisfied through the following:

* Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV.

| Elective | 4 |  |
| :--- | :--- | :--- |
| Humanities, Fine Arts and Design (HU) OR |  |  |
| Cultural Diversity in the U.S. (C) OR | 3 | C |
| Global Awareness (G) OR |  |  |
| Historical Awareness (H) OR |  |  |
| Foundations of Behavior Course |  |  |

Term hours subtotal: 15

| Term 5 60-75 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Upper Division Breadth within Psychology AND Upper Division Social and Behavioral Sciences (SB) |  | 3 | C | - See Note 2 below in additional notes concerning Breadth within Psychology. <br> - See Note 1 below in additional notes concerning Foundations of Behavior. If HU, Awareness Areas, and Foundation of Behavior are completed - Upper Division (300-400 level) University Elective. <br> - See Note 5 below in additional notes concerning the Upper Division Psychology Residency Requirement. |
| Upper Division Breadth within Psychology |  | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR <br> Upper Division Cultural Diversity in the U.S. (C) OR <br> Upper Division Global Awareness (G) OR <br> Upper Division Historical Awareness (H) OR <br> Upper Division Foundations of Behavior Course |  | 3 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) |  | 4 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 16 |  |  |


| Term 6 76-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Complete 2 courses: <br> Upper Division Breadth within Psychology |  | 6 | C | - See Note 2 below in additional notes concerning Breadth within Psychology <br> - See Note 4 below in additional notes concerning Additional Psychology Courses. <br> - See Note 1 below in additional notes concerning Foundations of Behavior. If HU, Awareness Areas, and Foundations of Behavior are completed - Upper Division (300-400 level) University Elective. <br> - See Note 5 below in additional notes concerning the Upper Division Psychology Residency Requirement. |
| Complete 2 courses: <br> PGS OR PSY Upper Division Elective |  | 6 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR <br> Upper Division Cultural Diversity in the U.S. (C) OR <br> Upper Division Global Awareness (G) OR <br> Upper Division Historical Awareness (H) OR <br> Upper Division Foundations of Behavior Course |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |


| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Upper Division Depth within Psychology |  | 6 | C | - See Note 3 below in additional notes concerning Depth within Psychology. <br> - See Depth within Psychology course list for upper division Literacy and Critical Inquiry (L) options. <br> - See Note 1 below in additional notes concerning Foundations of Behavior. If HU, Awareness Areas, and Foundation of Behavior are completed - Upper Division (300-400 level) University elective. <br> - See Note 5 below in additional notes concerning Upper Division Psychology Residency Requirement. |
| Upper Division Literacy and Critical Inquiry (L) OR Upper Division Elective |  | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR <br> Upper Division Cultural Diversity in the U.S. (C) OR <br> Upper Division Global Awareness (G) OR <br> Upper Division Historical Awareness (H) OR <br> Upper Division Foundations of Behavior Course |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |


| Upper Division Humanities, Fine Arts and Design (HU) OR |  |
| :--- | :---: |
| Upper Division Cultural Diversity in the U.S. (C) OR |  |
| Upper Division Global Awareness (G) OR |  |
| Upper Division Historical Awareness (H) OR |  |
| Upper Division Foundations of Behavior Course |  |
| Upper Division Elective |  |
| Complete 3 courses: | Term hours subtotal: |
| Elective | 15 |

- See Note 1 below in additional notes concerning Foundations of Behavior. If HU, Awareness Areas, and Foundations of Behavior are completed - Upper Diision (300-400 level)
University Elective
- See Note 5 below in additional notes concerning the Upper Division Psychology Residency Requirement.
- $\quad$ Foundations of Behavior (12 hours required): Students must complete a minimum of 6 hours of HU courses, three Awareness courses (C, G, and H) and 12 hours of Foundations of Behavior courses; however, with careful selection, courses may be used to fulfill more than one of these requirements.
- Breadth within Psychology: Take 1 course each from 4 of the 5 clusters (4 courses): Biological, Personality/Mental Health, Cognitive/Learning, Developmental or Social.
- Depth within Psychology: Take 2 additional courses from the list below. At least one must be 400 level.
- Additional Psychology Courses (Take 3 additional courses): At least two must be upper division and 1 MAY be lower division (excluding PGS 194 and PGS 270). No more than 6 hours (total) from the following course list may be used to fulfill this requirement: PSY 390, PGS 394: Undergrad TA, PGS/PSY 399, PGS/PSY 484, PSY 492, PSY 493, PGS/PSY 499.
- Upper Division Psychology Residency Requirement: 12 credit hours of PGS/PSY courses must be completed at the Tempe campus.
- Minimum of 37 hours of Psychology (PGS/PSY) coursework must be taken.
- There is room in this map to add a concurrent degree, minor, or certificate

| Personality/Mental Health Breadth | Cognitive/Learning Breadth | Biological Breadth |
| :---: | :---: | :---: |
| PGS 315: Personality Theory and Research (SB) | PSY 320: Learning and Motivation | PSY 325: Physiological Psychology |
|  | PSY 323: Sensation and Perception |  |
| PGS 466: Abnormal Psychology (SB) | PSY 324: Memory and Cognition |  |
| Depth within Psychology ( 2 courses from the following list, one must be 400 level) | Developmental Breadth | Social Breadth |
|  | PGS 341: Developmental Psychology (SB) | PGS 306: Environmental Psychology (SB) |
| PGS 315: Personality Theory and Research (SB) |  | PGS 350: Social Psychology (SB) |

PSY 320: Learning and Motivation
PSY 323: Sensation and Perception
PSY 324: Memory and Cognition
PGS 344: Directed Child Study (SB)
PGS 350: Social Psychology (SB)
PGS 351: Honors Social Psychology (L or SB)

PGS 365: Community Psychology (SB)
PSY 394: Psychology of Humor
PGS 414: History of Psychology (L or SB)
PSY 420: Analysis of Behavior (L)
PSY 424: Genetic Psychology (L)
PSY 425: Biological Bases of Behavior (L)
PSY 426: Neuroanatomy
PSY 427: Immunoneuropsychology: Research Foundation

PGS 430: Industrial Psychology
PSY 434: Cognitive Psychology (L)
PSY 437: Human Factors (L)
PGS 441: Cognitive Development (L or SB)
PGS 443: Abnormal Child Psychology (L or SB)


## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division.A Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. Â When you complete both courses, all three learning goals must be filled in order to complete the requirement.Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Psychology, BS

College of Liberal Arts and Sciences
Campus:Tempe
LAPGSBS

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101: First-Year Composition AND <br> ENG 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107: English for Foreign Students AND <br> ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer or TOEFL score determines placement into First-Year Composition. <br> - The Math Placement Exam scor determines placement into MATH. <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students- LIA 194 or a 191 level course offered by the College of Lieberal Arts and Sciences. <br> - See Note 1 below in Additional Notes concerning Foundations of Behavior. |
| PGS 101: Introduction to Psychology (SB) | 3 | C |  |
| MAT 251: Calculus for Life Sciences (MA) OR MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences OR First-Year Seminar | 1 |  |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) OR Foundations of Behavior | 3 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 2 17-31 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| ENG 101: First-Year Composition AND <br> ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107: English for Foreign Students AND ENG 108: English for Foreign Students | 3 | C | - If the FYC requirement is completed - PGS/PSY course (NOT PGS 194, PGS 270) or a University Elective. See Note 4 below in Additional Notes concerning Additional Psychology Courses. <br> - If MAT 251 or MAT 270 is completed - University Elective. <br> - See Note 1 below in Additional Notes concerning Foundations of Behavior. |
| MAT 251: Calculus for Life Sciences (MA) OR MAT 270: Calculus with Analytic Geometry I (MA) OR Elective | 3-4 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) OR Foundations of Behavior | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Elective | 2 |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| MAT 251: Calculus for Life Sciences (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) OR Elective | 3 | C | - FYC must be completed by the end of Term 3. If the FYC requirement is completed PGS/PSY course (NOT PGS 194, PGS 270) or a University Elective. See Note 4 below in Additional Notes concerning Additional Psychology Courses. <br> - MAT 251 or MAT 270 must be completed by the end of Term 3. If MAT 251 or MAT 270 is completed - University Elective. <br> - See Note 1 below in Additional Notes concerning Foundations of Behavior. |
| 9 PSY 230: Introduction to Statistics (CS) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) OR Foundations of Behavior | 3 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Elective | 3 |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| 4 PSY 290: Research Methods (L or SG) | 4 C |  |  |


| CLAS Science and Society Elective | 3 | C |
| :--- | :---: | :---: |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR |  |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR <br> Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) OR <br> Foundations of Behavior | 3 | C |
| Elective |  | 3 |
| PSY OR PGS Elective | Term hours subtotal: | 16 |

- PGS/PSY Course - NOT PGS 194, PGS 270. See Note 4 below in additional notes concerning Additional Psychology Courses
- CLAS Science and Society requirement:
http://clas.asu.edu/scienceandsociet
- See Note 1 below in additional notes for Foundations of Behavior. If HU, Awareness Areas and Foundations of Behavior requirements are completed University Elective.

| Term 5 64-78 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| PSY 330: Statistical Methods (CS) |  | 3 | C | - See Note 4 below in additional notes concerning Additional Psychology Courses. <br> - See Note 2 below in additional notes concerning Breadth within Psychology. <br> - CLAS Science and Society: http://clas.asu.edu/scienceandsociety <br> - See Note 1 below in additional notes concerning Foundations of Behavior. If HU, Awareness Areas, and Foundations of Behavior are completed - Upper Division (300-400 level) University Elective. <br> - See Note 5 below in additional notes concerning the Upper Division Psychology Residency Requirement. |
| Upper Division Breadth within Psychology AND Upper Division Social and Behavioral Sciences (SB) |  | 3 | C |  |
| Upper Division Breadth within Psychology |  | 3 | C |  |
| Upper Division CLAS Science and Society Elective |  | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR <br> Upper Division Cultural Diversity in the U.S. (C) OR <br> Upper Division Global Awareness (G) OR <br> Upper Division Historical Awareness (H) OR <br> Upper Division Foundations of Behavior |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term6 $69-93$ Credit Hours |  |  | Minimum Grade | Notes |

PGS 399: Supervised Research OR
PSY 499: Individualized Instruction OR
PSY 390: Experimental Psychology (L) OR
PSY 399: Supervised Research OR
3 C
PSY 492: Honors Directed Study OR
PSY 493: Honors Thesis (L)

Complete 2 courses:
Upper Division Breadth within Psychology
Upper Division Depth Within Psychology AND
Upper Division Literacy and Critical Inquiry (L) OR
Upper Division Depth Within Psychology
Upper Division Humanities, Fine Arts and Design (HU) OR
Upper Division Cultural Diversity in the U.S. (C) OR
Upper Division Global Awareness (G) OR
Upper Division Historical Awareness (H) OR
Upper Division Foundations of Behavior
Term hours subtotal:
15

- See Note 4 below in additional notes concerning Additional Psychology Courses.
- See Note 1 below in additional notes concerning Foundations of Behavior. If HU, Awarenes Areas, and Foundations of Behavior are completed - Upper Division (300-400 level) University Elective.
- See Note 2 below in additional notes concerning Breadth within Psychology.
- See Note 3 below in additional notes concerning Depth within Psychology.
- See Note 5 below in additional notes concerning the Upper Division Psychology Residency Requirement.

| Term 7 94-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 4** Depth within Psychology |  | 3 | C | - See Note 3 below in additional notes concerning Depth within Psychology. |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR <br> Upper Division Cultural Diversity in the U.S. (C) OR <br> Upper Division Global Awareness (G) OR <br> Upper Division Historical Awareness (H) OR <br> Upper Division Foundations of Behavior |  | 3 | C | Psychology. <br> - See Depth within Psychology course list for Upper Division (300-400 level) Literacy and |
| Complete 2 courses: Elective |  | 6 |  | - See Note 1 below in additional |
|  | Term hours subtotal: | 15 |  | Behavior. If HU, Awareness Areas, and Foundation of Behavior are completed - Upper |

Division (300-400 level)
University Elective

- See Note 5 below in additional notes concerning Upper Division
Psychology Residency
Requirement.

| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Upper Division Humanities, Fine Arts and Design (HU) OR <br> Upper Division Cultural Diversity in the U.S. (C) OR <br> Upper Division Global Awareness (G) OR <br> Upper Division Historical Awareness (H) OR <br> Upper Division Foundations of Behavior |  | 3 | C | - See Note 1 below in additional notes concerning Foundations of Behavior. If HU, Awareness Areas, and Foundation of Behavior are completed - Upper Division (300-400 level) University Elective. <br> - See Note 5 below in additional notes concerning Upper Division Psychology Residency Requirements. |
| Upper Division Elective |  | 3 |  |  |
| Complete 3 courses: Elective |  | 6 |  |  |
|  | Term hours subtotal: | 12 |  |  |

- Foundations of Behavior ( 12 hours required): Students must complete a minimum of 6 hours of HU courses, three Awareness courses (C, G, and H) and 12 hours of Foundations of Behavior courses; however, with careful selection, courses may be used to fulfill more than one of these requirements.
- Breadth within Psychology: Take 1 course each from 4 of the 5 clusters (4 courses): Biological, Personality/Mental Health, Cognitive/Learning, Developmental or Social.
- Depth within Psychology: Take 2 additional courses from the list below. At least one must be 400 level.
- Additional Psychology Courses (Take 3 additional courses): PSY 330 Statistical Methods, 3 credit hours of Research Experience (PSY 390, PGS 399, PSY 492, PSY 493, PSY 499), 3 credit hours of PGS/PSY (NOT PGS 194 or PGS 270).
- Upper Division Psychology Residency Requirement: 12 credit hours of PGS/PSY courses must be completed at the Tempe campus.
- Minimum of 37 hours of Psychology (PGS/PSY) coursework must be taken.
- There is room in this map to add a concurrent degree, minor, or certificate

| Social Breadth | Depth within Psychology ( 2 courses from the following list, one must be 400 level) | Biological Breadth |
| :---: | :---: | :---: |
| PGS 350: Social Psychology (SB) |  | PSY 325: Physiological Psychology |
|  | PSY 394: Psychology of Humor |  |
| PGS 351: Honors Social Psychology (L or SB) | PGS 315: Personality Theory and Research (SB) |  |
|  | PSY 320: Learning and Motivation |  |
|  | PSY 323: Sensation and Perception |  |
|  | PSY 324: Memory and Cognition |  |
|  | PGS 344: Directed Child Study (SB) |  |
|  | PGS 350: Social Psychology (SB) |  |
|  | PGS 351: Honors Social Psychology (L or SB) |  |
|  | PGS 365: Community Psychology (SB) |  |
|  | PGS 414: History of Psychology (L or SB) |  |
|  | PSY 420: Analysis of Behavior (L) |  |
|  | PSY 424: Genetic Psychology (L) |  |
|  | PSY 425: Biological Bases of Behavior (L) |  |
|  | PSY 426: Neuroanatomy |  |
|  | PSY 427: Immunoneuropsychology: Research Foundation |  |
|  | PGS 430: Industrial Psychology |  |
|  | PSY 434: Cognitive Psychology (L) |  |
|  | PSY 437: Human Factors (L) |  |
|  | PGS 441: Cognitive Development (L or SB) |  |


|  | PGS 443: Abnormal Child Psychology (L or SB) |  |
| :---: | :---: | :---: |
|  | PGS 444: Adolescent Psychology and Psychopathology |  |
|  | PGS 445: Child Language and Drawing (SB) |  |
|  | PGS 446: Social Development (L or SB) |  |
|  | PGS 451: Stereotyping, Prejudice, and Discrimination (L) |  |
|  | PGS 452: Applied Social Psychology (L) |  |
|  | PGS 458: Group Dynamics |  |
|  | PGS 461: Interpersonal Influence (SB) |  |
|  | PGS 462: Health Psychology |  |
|  | PGS 464: Minority Issues in Psychology |  |
|  | PGS 465: Psychology of Stress and Coping |  |
|  | PGS 466: Abnormal Psychology (SB) |  |
|  | PGS 468: Psychology and Law |  |
|  | PGS 471: Psychological Testing |  |
|  | PGS 472: Clinical Psychology |  |
|  | PSY 498: Behavioral Neuroscience Research |  |
|  | PSY 498: Neuroscience of Memory and Aging |  |
|  | PSY 498: Neurobiology Learning and Memory |  |
|  | PGS 498: Intellectual Disabilities: Autism to fragile X |  |
|  | PGS 498: Health Promotion in Minority Populations |  |
|  | PGS 498: Psychology of Addictions |  |
|  | PSY 498: Emotions, Stress, and Health |  |
|  | PGS 498: The Psychology of e-Learning and Gaming |  |
|  | PSY 498: Embodied Cognition |  |
|  | PSY 498: Dynamics in Psychology |  |
|  | PGS 498: Home Impact on Children |  |
|  | PGS 498: Cross-Cultural Psychology |  |
|  | PGS 498: Diversity and the Psychology of Women |  |
|  | PGS 498: Psychology of Emotions |  |
| Cognitive/Learning Breadth | Developmental Breadth | Personality/Mental Health Breadth |
| PSY 320: Learning and Motivation | PGS 341: Developmental Psychology (SB) | PGS 315: Personality Theory and Research (SB) |
| PSY 323: Sensation and Perception |  | PGS 466: Abnormal Psychology (SB) |
| PSY 324: Memory and Cognition |  |  |
| Foundations of Behavior (12 credit hours from the following options) | Additional Psychology Courses |  |
| ASB Elective | PGS OR PSY Elective |  |
| ASM Elective | PSY 330: Statistical Methods (CS) |  |
| BIO Elective | PGS 399: Supervised Research |  |
| GCU Elective | PSY 499: Individualized Instruction |  |
| HPS Elective | PSY 492: Honors Directed Study |  |
| PHI Elective | PSY 493: Honors Thesis (L) |  |
|  | PSY 390: Experimental Psychology (L) |  |
| SOC Elective |  |  |

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety.Â At least one of the two courses taken from the list must be upper division.Â Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Religious Studies, BA

College of Liberal Arts and Sciences
Campus:Tempe
LARELBA

| Term 1 0-15 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101: First-Year Composition OR <br> ENG 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107: English for Foreign Students OR <br> ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| LIA 194: Academic Success Seminar, Intro to Liberal Arts and Sciences | 1 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Elective | 1 |  |  |
| Minimum 2.50 GPA in REL. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 2 16-30 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| ENG 101: First-Year Composition OR <br> ENG 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107: English for Foreign Students OR <br> ENG 108: English for Foreign Students | 3 | C |  |
| 4 REL Lower Division Elective | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Elective | 1 |  |  |
| Minimum 2.50 GPA in REL. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 31-46 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 1 REL 207: Ritual, Symbol, and Myth (L or HU) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| CSE 180: Computer Literacy (CS) OR Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Cultural Diversity in the U.S. (C) OR Global Awareness (G) OR Historical Awareness (H) | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |

Minimum 2.50 GPA in REL.
Term hours subtotal: 16

| Term 4 $47-60$ Credit Hours Critical course signified by | Hours | Minimum <br> Grade |
| :--- | :--- | :---: |
| REL 307: Approaches to Religion | 3 | C |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including <br> American Sign Language IV. | 4 | C |



- Students must complete at least 9 credits from a concentration in a specific theme, tradition, or geographic area chosen in consultation with a Religious Studies advisor. Theme concentrations are chosen from Religion in a Global Context; Religion, Public Life, and Conflict; or Text, Practice, and Representation. Tradition concentrations are chosen from Judaism, Christianity, Islam, Buddhism, Hinduism, or Daoism/Confucianism. Geographic Area concentrations are chosen from the Americas, Europe/Eurasia, East Asia, South Asia, or Southeast Asia.
Themes

| REL 201: Religion and the Modern World (L |
| :--- |
| or HU) |
|  |
| C) |

Traditions
REL 210: Introduction to Judaism ((L or HU
)\& H)

REL 294: Introduction to Jewish Civilization
Geographic Areas
REL 225: African American Religion (HU \&
C)

REL 318: Contemporary American Jewish Identities ((HU or SB) \& C)

REL 240: Introduction to Southeast Asia ((HU or SB) \& G)

REL 313: Anti-Semitism in the Media
REL 320: American Religious Traditions (HU \& C \& H)

REL 324: Spirituals and the Blues
REL 331: History of Native American Religious Traditions ((L or HU) \& C \& H)

REL 346: Chinese Religions
REL 354: Religious Traditions of Korea (HU)
REL 365: Islamic Civilization (HU \& H)
REL 366: Islam in the Modern World (HU \& H \& G)

REL 377: Religion in Russia (HU \& H)
REL 379: Religion, Nationalism, and Ethnic Conflict (HU \& G)

REL 380: Theology of Terror
REL 394: Introduction to the Quran, Martyrdom and Self Sacrifice, Quran Text and Women, Spanish Inquisition, The Chinese Bible: The Daode Jing

REL 410: Judaism in Modern Times (HU \& H)

REL 430: Mesoamerican Shamanic Cosmographies

REL 444: Religion in Japan (HU \& H \& G)
REL 470: Religion in the Middle Ages (HU \& H)

REL 480: Religion and Global Politics (G)
REL 482: Religion, Violence, and Conflict Resolution

REL 318: Contemporary American Jewish Identities ((HU or SB) \& C)

REL 321: Religion in America (HU \& C \& H)

REL 323: African American Religion: A Biographical Approach (HU \& C)

REL 357: Theravada Buddhism in South and Southeast Asia (L \& G)

REL 369: Women in Islam
REL 373: Women in Judaism
REL 374: Witchcraft and Heresy in Europe (L \& H)

REL 381: Religion and Moral Issues (L or HU)

REL 382: Religion, Magic, and Science (L or HU)

REL 386: America and the Holocaust (HU or SB)

REL 388: Religion, Ethics, and International Politics

REL 390: Women and Religion (HU \& G)
REL 461: Different Voices Within
Contemporary Islamic Discourse
REL 471: Reformation and Modern
Christianity (HU \& H)
REL 486: Holocaust on Film

REL 310: Western Religious Traditions (HU \& H)
REL 313: Anti-Semitism in the Media
REL 314: Jewish Philosophy
REL 315: Hebrew Bible (Old Testament) ((L
or HU )\& H)
REL 317: Introduction to Rabbinic Judaism
(HU \& H)
REL 318: Contemporary American Jewish
Identities ((HU or SB) \& C)
REL 373: Women in Judaism
REL 384: The Bible and Archaeological
Discoveries Discoveries

REL 386: America and the Holocaust (HU or SB)

REL 394: American Islam, Buddhism in China, Islam and Islamic Societies in Africa, Islam and World Affairs, Martyrdom and Self Sacrifice, Quran Text and Women, Spanish Inquisition, The Chinese Bible: The Daode Jing, The Daoist Bible: Dao De Jing

REL 396: Women in the Bible
REL 410: Judaism in Modern Times (HU \& H)

REL 486: Holocaust on Film
REL 494: Critical Theory: Post-Holocaust Ethics, Places \& Meanings, Russian Mystics and Saints, Taoist Texts

REL 260: Introduction to Islam (HU \& G)
REL 365: Islamic Civilization (HU \& H)
REL 366: Islam in the Modern World (HU \& H \& G)

REL 369: Women in Islam
REL 377: Religion in Russia (HU \& H)
REL 380: Theology of Terror
REL 225: African American Religion (HU \& C)

REL 270: Introduction to Christianity (HU)
REL 354: Religious Traditions of Korea (HU)
REL 371: New Testament (HU)
REL 372: formation of the Christian Tradition ( $\mathrm{HU} \& \mathrm{H}$ )

REL 374: Witchcraft and Heresy in Europe (L \& H)

REL 375: Lost Scriptures, Lost Christianities (HU)

REL 376: Virgin Mary in History, Film, and Culture (L or HU)

REL 470: Religion in the Middle Ages (HU
\& H)
REL 471: Reformation and Modern
Christianity (HU \& H)
REL 344: Religion and Values in Japanese Life (HU \& G)

REL 345: Asian Religious Traditions (HU \& G)

REL 351: Buddhism ((L or HU) \& G)
REL 354: Religious Traditions of Korea (HU)

REL 320: American Religious Traditions (HU \& C \& H)

REL 321: Religion in America (HU \& C \& H)

REL 323: African American Religion: A Biographical Approach (HU \& C)

REL 324: Spirituals and the Blues
REL 326: Latina/o and Latin American Religions and Cultures (HU \& C)

REL 330: Native American Religious Traditions (HU \& C)

REL 331: History of Native American Religious Traditions ((L or HU) \& C \& H)

REL 332: South American Indian Religions (HU \& G)

REL 356: Buddhism in America
REL 386: America and the Holocaust (HU or SB)

REL 420: Religion in American Life and Thought (HU)

REL 427: American Religious Thought (HU \& H)

REL 430: Mesoamerican Shamanic
Cosmographies
REL 240: Introduction to Southeast Asia ((HU or SB) \& G)

REL 351: Buddhism ((L or HU) \& G)
REL 357: Theravada Buddhism in South and Southeast Asia (L \& G)

REL 343: Daoism ((L or HU) \& G \& H)
REL 344: Religion and Values in Japanese Life (HU \& G)

REL 346: Chinese Religions
REL 353: Folk Religions of Korea
REL 354: Religious Traditions of Korea (HU)
REL 355: Japanese Cities and Cultures to 1800 (HU \& H)

REL 394: Art of India and South Asia, Buddhism in China, Religions of India

REL 444: Religion in Japan (HU \& H \& G)
REL 374: Witchcraft and Heresy in Europe (L
\& H)
REL 377: Religion in Russia (HU \& H)
REL 470: Religion in the Middle Ages (HU
\& H)
REL 471: Reformation and Modern
Christianity (HU \& H)

| REL 494: Critical Theory: Post-Holocaust Ethics | Buddhism in America |
| :---: | :---: |
|  | REL 357: Theravada Buddhism in South and Southeast Asia (L \& G) |
| REL 202: Religion and Popular Culture (HU \& C) |  |
|  | REL 44. Religion in Japan (HU \& H \& G) |
| REL 203: Saints and Sinners: Explorations in Sacred Biography (HU \& H) |  |
| REL 205: Living and Dying (HU) | REL 346: Chinese Relig |
| REL 294: Introduction to Jewish Civilization | REL 354: Religious Traditions of Korea (HU) |
| REL 301: Comparative Mysticism (HU) | REL 350: H |
| REL 310: Western Religious Traditions (HU \& H) |  |
| REL 314: Jewish Philosophy |  |
| REL 315: Hebrew Bible (Old Testament) ((L or HU )\& H ) |  |
| REL 317: Introduction to Rabbinic Judaism ( $\mathrm{HU} \& \mathrm{H}$ ) |  |
| REL 326: Latina/o and Latin American Religions and Cultures (HU \& C) |  |
| REL 330: Native American Religious Traditions (HU \& C) |  |
| REL 332: South American Indian Religions $(H U \& G)$ |  |
| REL 344: Religion and Values in Japanese Life (HU \& G) |  |
| REL 345: Asian Religious Traditions (HU \& G) |  |
| REL 353: Folk Religions of Korea |  |
| REL 355: Japanese Cities and Cultures to 1800 (HU \& H) |  |
| REL 371: New Testament (HU) |  |
| REL 375: Lost Scriptures, Lost Christianities (HU) |  |
| REL 376: Virgin Mary in History, Film, and Culture (L or HU) |  |
| REL 384: The Bible and Archaeological Discoveries |  |
| REL 385: Contemporary Western Religious Thought (HU) |  |
| REL 391: Historical Perspectives on Philosophy and Religion |  |
| REL 393: Religion and Sexuality (HU) |  |
| REL 395: Religion and Psychology |  |
| REL 396: Women in the Bible |  |
| REL 420: Religion in American Life and Thought (HU) |  |
| REL 427: American Religious Thought (HU \& H) |  |
| REL 460: Studies in Islamic Religion (HU \& G) |  |
| REL 483: Religion and Science |  |
| REL 487: Religion and Film |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division.A Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. Â When you complete both courses, all three learning goals must be filled in order to complete the requirement.Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.
- Students choose a total of 15 credits from the Related Areas below in consultation with an academic advisor. In addition, students may also choose courses from a third language. Please see a Religious Studies advisor for suggestions and more information about possible related areas.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4) ARIZONA State UNIVERSITY

## 2011-2012 Major Map

## Russian, BA

College of Liberal Arts and Sciences
Campus:Tempe
LARUSBA

| Term 1 0-15 Credit Hours Critical course signified by 9 |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 4 RUS 101: Elementary Russian |  | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| MAT 142: College Mathematics (MA) |  | 3 | C |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |  |
| SLC 294: Language Exploration |  | 2 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 2 16-29 Credit Hours Critical course signified by ${ }^{\text {- }}$ |  | Hours | Minimum Grade | Notes |
| 4 RUS 102: Elementary Russian |  | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Historical Awareness (H) |  | 3 |  |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Elective |  | 1 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 3 30-46 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |


| RUS 201: Intermediate Russian (G) | 4 | C |
| :--- | :--- | :--- |
| RUS 211: Basic Russian Conversation (G) | 3 | C |
| SLC 201: Introduction to Linguistics (HU or SB) OR | 3 |  |
| SLC 202: Introduction to Literary and Cultural Theory | 4 |  |
| Natural Science - Quantitative (SQ) | 3 |  |
| Cultural Diversity in the U.S. (C) |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |

4 Complete First-Year Composition requirement.
Complete Mathematics (MA) requirement.
Term hours subtotal:
17

| Term 4 $47-60$ Credit Hours Critical course signified by | Hours | Minimum <br> Grade |  |
| :--- | :---: | :---: | :---: |
| RUS 202: Intermediate Russian (G) | 4 | Notes |  |
| RUS 212: Basic Russian Conversation (G) | 3 | C |  |
| SLC 201: Introduction to Linguistics (HU or SB) OR | 3 | C |  |
| SLC 202: Introduction to Literary and Cultural Theory | 4 |  |  |
| Natural Science - Quantitative (SQ) OR |  |  |  |
| Natural Science - General (SG) |  |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. | Term hours subtotal: | 14 |  |

## Minimum

| Term 5 61-75 Credit Hours |  | Hours | Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| RUS 311: Russian Composition and Conversation (G) |  | 3 | C | - Enroll in Study Abroad Program credits or listed courses |
| RUS OR SLV Upper Division Elective |  | 3 | C |  |
| Related Area Course |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| RUS 312: Russian Composition and Conversation (G) |  | 3 | C | - Enroll in Study Abroad Program credits or listed courses |
| SLV 304: Computational Linguistics of Slavic Languages (CS) |  | 3 | C |  |
| Related Area Course |  | 3 | C |  |
| RUS OR SLV Upper Division Elective AND Upper Division Literacy and Critical Inquiry (L) |  | 3 | C |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| RUS 411: Advanced Composition and Conversation I (G) OR RUS 412: Advanced Composition and Conversation II (G) |  | 3 | C | - Enroll in Study Abroad Program credits or listed courses |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
| RUS OR SLV 4** Elective |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| RUS 498: Pro-Seminar OR <br> SLV 498: Pro-Seminar |  | 3 | C | - Enroll in Study Abroad Program credits or listed courses |
| SLC 4** Elective OR <br> SLC 498: Capstone |  | 3 | C |  |
| Complete 3 courses: <br> Upper Division Elective |  | 9 |  |  |
|  | Term hours subtotal: | 15 |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of $C$ or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.A A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. A At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. $\hat{A}$ At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses.A When you complete both courses, all three learning goals must be filled in order to complete the requirement.A Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.
- Russian is a flexible liberal arts major. Students must bear in mind that credits toward the major and minor can only be accumulated after completion of intermediate Russian. RUS 101, 102 or 111 are not major requirements, but demonstrated proficiency at or above the 202 level is required for enrollment in upper-division major requirement courses. A maximum of 6 hours from the Intermediate Russian language sequence (RUS 201: Intermediate Russian I and RUS 202: Intermediate Russian II) may be used toward major requirements. Students are strongly encouraged to contact an academic advisor regarding clarifications on course applicability.
- Degree offerings in the School of International Letters \& Cultures are flexible liberal arts majors. Students must bear in mind that the credits toward the major and minor can only be accumulated after completion of preparatory language courses. These preparatory courses are not major requirements and do not count toward the hours the student needs to complete degree requirements. Demonstrated proficiency at the intermediate level is required for enrollment in major requirement courses. Students are strongly encouraged to contact an academic advisor regarding clarifications on course applicability.

| Major GPA: 2.00 minimum | General Studies Core Requirements: | - Cultural Diversity in the U.S. (C) |
| :--- | :--- | :--- |
| Cumulative GPA: 2.00 minimum | - Literacy and Critical Inquiry (L) | - Global Awareness (G) |
| Total hrs at ASU: 30 minimum | - Mathematical Studies (MA) | • Historical Awareness (H) |
| Hrs Resident Credit for | - Computer/Statistics/Quantitative Applications |  |
| Academic Recognition: 56 minimum | (CS) |  |
| Total Community College Hrs: 64 maximum | - Humanities, Fine Arts and Design (HU) |  |
|  | - Social and Behavioral Sciences (SB) |  |
|  | - Natural Science - Quantitative (SQ) |  |
|  | - Natural Science - General (SG) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4 1 ARIZONA State UNIVERSITY

## 2011-2012 Major Map Sociology, BS

College of Liberal Arts and Sciences
Campus:Online, Tempe
LASOCBS

| Term 1 0-13 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| 4 SOC 101: Introductory Sociology (SB) |  | 3 | C |  |
| LIA 194: Intro to Liberal Arts and Sciences |  | 1 |  |  |
| Complete 2 courses: Elective |  | 6 |  |  |
|  | Term hours subtotal: | 13 |  |  |


| Term 2 14-29 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| SOC 241: Modern Social Problems (SB) OR SOC 270: Racial and Ethnic Relations (SB \& C) OR SOC 264: Gender and Society ((L or SB) \& C) AND Cultural Diversity in the U.S. (C) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Related Area Course | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 30-45 Credit Hours Critical course signified by 4. | Hours | Minimum Grade | Notes |
| 1 MAT 142: College Mathematics (MA) | 3 | C |  |
| SOC Elective | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Elective | 3 |  |  |
| Complete First-Year Composition requirement. |  |  |  |

Term hours subtotal:
16


| Term 5 61-75 Credit Hours |  | Hours | Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| SOC Upper Division Elective |  | 3 | C |  |
| CLAS Science and Society Elective |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Related Area Course |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| SOC 391: Research Methods (L or SB) OR <br> SBS 303: Quantitative Methods |  | 3 | C |  |
| SOC Upper Division Elective |  | 3 | C |  |
| Upper Division CLAS Science and Society Elective |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| SOC 483: History of Social Thought (SB) OR SOC 486: Contemporary Theory (SB) |  | 3 | C |  |
| SOC Upper Division Elective |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| SOC Upper Division Elective |  | 3 | C |  |
| Related Area Course AND Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Related Area Course |  | 3 |  |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |

- REL 100, WST 413, WST 464 and WST 470 Related Field courses not allowed.
FAS Electives
FAS 101: Personal Growth in Human
Relationships (SB)
FAS 264: Gender and Society (SB \& C)
FAS 294: Special Topics
FAS 301: Introduction to Parenting
FAS 324: Work and the Workplace (SB \& H)
FAS 331: Marriage and Family Relationships
FB
FAS 332: Human Sexuality (SB)
\& C)
FAS 370: Family Ethnic and Cultural
Diversity (SB \& C)
FAS 390: Supervised Research Experience
FAS 435: Advanced Marriage and Family
Relationships (L or SB)

| CDE Electives | SOC Electives |
| :---: | :---: |
| CDE 232: Human Development (SB) | SOC 294: Special Topics |
| CDE 312: Adolescence (SB) | SOC 312: Adolescence (SB) |
| CDE 337: Early Childhood Intervention | SOC 315: Courtship and Marriage (SB) |
| CDE 338: Child Development Practicum | SOC 324: Work and the Workplace (SB \& H) |
| CDE 394: Special Topics | SOC 334: Technology and Society (L or SB) |
| CDE 430: Infant/Toddler Development in the Family (SB) | SOC 340: The Sociology of Deviance (SB) |
|  | SOC 352: Social Change (SB \& G \& H) |
| CDE 499: Individualized Instruction | SOC 415: The Family (SB) |
|  | SOC 418: Aging and the Life Course (SB \& H) |
|  | SOC 421: Education and Society (SB) |
|  | SOC 424: Women and Health (SB) |
|  | SOC 427: Sociology of Health and Illness (SB) |

FAS 484: Internship
FAS 492: Honors Directed Study
FAS 493: Honors Thesis (L)
FAS 498: Pro-Seminar
FAS 499: Individualized Instruction
SOC Related Area Course
AFS Elective
ASB Elective
CDE Elective
CSS Elective
ECN Elective
FAS Elective
GCU Elective
HST Elective
POS Elective
PGS Elective
TCL Elective
WST Elective
SOC 435: Advanced Marriage and Family
Relationships (L or SB)
SOC 484: Internship
SOC 492: Honors Directed Study
SOC 493: Honors Thesis (L)
SOC 498: Pro-Seminar
SOC 499: Individualized Instruction

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. Â At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. A When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year

## 4UNIVERSITY

## 2011-2012 Major Map <br> Spanish, BA

College of Liberal Arts and Sciences
Campus:Tempe
LASPABA

| Term 1-15 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 SPA 111: Fundamentals of Spanish | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| SLC 294: Language Exploration | 2 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 2 16-31 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| SPA 201: Intermediate Spanish (G) OR <br> SPA 203: Intermediate Spanish for Bilinguals (G) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Historical Awareness (H) | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 32-45 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| SPA 202: Intermediate Spanish (G) OR <br> SPA 204: Intermediate Spanish for Bilinguals (G) | 4 | C |  |
| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 46-61 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| SPA 313: Spanish Conversation and Composition (G) OR SPA 315: Spanish Conversation and Composition for Bilinguals OR Upper Division Elective | 3 | C |  |
| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Elective | 3 |  |  |
| Maintain 2.33 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 62-76 Credit Hours | Hours | Minimum Grade | Notes |
| SPA 314: Spanish Conversation and Composition (G) OR SPA 316: Spanish Conversation and Composition for Bilinguals OR Upper Division Elective | 3 | C |  |


| SPA 325: Introduction to Hispanic Literature (HU) | 3 | C |  |
| :---: | :---: | :---: | :---: |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Complete 2 courses: Elective | 6 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 77-91 Credit Hours | Hours | Minimum Grade | Notes |
| SPA 412: Advanced Conversation and Composition (G) | 3 | C |  |
| SPA 471: Civilization of the Spanish Southwest ((L or HU) \& C) OR SPA 472: Spanish American Civilization (HU \& H \& G) OR SPA 473: Spanish Civilization ((HU or SB) \& G) | 3 | C |  |
| Upper Division SPA Track Course or Core | 6 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 92-106 Credit Hours | Hours | Minimum Grade | Notes |
| Upper Division SPA Track Course or Core | 12 | C |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 107-120 Credit Hours | Hours | Minimum Grade | Notes |
| SLC 4** Elective OR <br> SLC 498: Pro-Seminar | 3 | C |  |
| Upper Division SPA Track Course or Core | 9 | C |  |
| Elective | 2 |  |  |
| Term hours subtotal: | 14 |  |  |

- Students should consult their D.A.R.S. report to note the differences between the Literature and Culture and Linguistics tracks. If students have further questions they should consult with an academic advisor.

| Literature \& Culture Track | Linguistic Track |
| :---: | :---: |
| SPA 426: Spanish Literature (HU) | SPA 400: Introduction to Spanish Linguistics |
| SPA 427: Spanish American Literature (L) | SPA 413: Advanced Spanish Grammar (G) |
| SPA 428: Spanish American Literature (L \& | SPA 417: Spanish Phonetics and Phonology |
|  | SPA 418: Spanish Syntax |
| SPA 429: Mexican Literature | SPA 420: Applied Spanish Linguistics (L) |
| SPA 471: Civilization of the Spanish Southwest ((L or HU) \& C) |  |
|  | SPA 425: Spanish Literature (HU) |
| SPA 472: Spanish American Civilization (HU \& H \& G) | SPA 426: Spanish Literature (HU) |
| SPA 473: Spanish Civilization ((HU or SB) \& G) | SPA 427: Spanish American Literature (L) |
|  | SPA 428: Spanish American Literature (L \& G) |
| SPA 474: Mexican Culture |  |
| SPA 485: Mexican American Short Story (L) | SPA 464: Mexican American Literature ((HU or SB) \& C) |
| SPA 486: Mexican American Novel | SPA 494: Language Variations of Spanish |
| SPA 487: Mexican American Drama |  |
| POR 4** Elective |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. Â At least one of the two courses taken from the list must be upper division. A Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement.Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.
- Degree offerings in the School of International Letters \& Cultures are flexible liberal arts majors. Students must bear in mind that the credits toward the major and minor can only be accumulated after completion of preparatory language courses. These preparatory courses are not major requirements and do not count toward the hours the student needs to complete degree requirements. Demonstrated proficiency at the intermediate level is required for enrollment in major requirement courses. Students are strongly encouraged to contact an academic advisor regarding clarifications on course applicability.
- Students majoring in Spanish will choose between tracks in either Literature and Culture or Linguistics. Students should make a decision after the completion of SPA 325 and/or SPA 412. While there are common requirements between both tracks, there are also differences in the number of credit hours required in track-level courses. Students are strongly advised to see an academic advisor to discuss these differences. Before meeting with an academic advisor students should consult their D.A.R.S. report to become acquainted with the differences in track-level requirements. Regardless of which track the student chooses, s/he will graduate with a B.A. in Spanish. The track denotation will appear on the transcript.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Speech \& Hearing Science, BS

College of Liberal Arts and Sciences
Campus:Tempe
LASHSBS

| Term 1 0-13 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 9 SHS 105: Introduction to Human Communication Disorders |  | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Historical Awareness (H) |  | 3 |  |  |
| MAT prerequisite (if needed) OR Elective |  | 3 |  |  |
| SHS 191: First-Year Seminar OR <br> LIA 194: Intro to Liberal Arts and Sciences |  | 1 |  |  |
| Maintain 2.80 GPA in Critical Tracking Courses. |  |  |  |  |
|  | Term hours subtotal: | 13 |  |  |
| Term 2 14-28 Credit Hours Critical course signified by ${ }^{(1)}$ |  | Hours | Minimum Grade | Notes |
| 1 PGS 101: Introduction to Psychology (SB) |  | 3 | C |  |
| 1. MAT 170: Precalculus (MA) |  | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Elective |  | 3 |  |  |
| Maintain 2.80 GPA in Critical Tracking Courses. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 3-44 Credit Hours Critical course signified by ${ }^{\text {2 }}$ |  | Hours | Minimum Grade | Notes |
| BIO 201: Human Anatomy and Physiology I (SG) OR PHY 101: Introduction to Physics (SQ) |  | 4 | C |  |
| PSY 230: Introduction to Statistics (CS) OR STP 226: Elements of Statistics (CS) |  | 3 | C |  |
| 4 SHS 250: Introduction to Phonetics |  | 3 | C |  |
| Global Awareness (G) |  | 3 |  |  |
| Elective |  | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |  |
| Maintain 2.80 GPA in Critical Tracking Courses. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 4 45-60 Credit Hours Critical course signified by ${ }^{\text {d }}$ |  | Hours | Minimum Grade | Notes |
| BIO 201: Human Anatomy and Physiology I (SG) OR PHY 101: Introduction to Physics (SQ) |  | 4 | C | - Complete all critical requiremen |
| 4 ENG 215: Strategies of Academic Writing (L) |  | 3 | C | the end of semester 4 |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Elective |  | 3 |  |  |
| Maintain 2.80 GPA in Critical Tracking Courses. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 5 61-75 Credit Hours |  | Hours | Minimum Grade | Notes |


| SHS 310: Anatomical and Physiological Bases of Speech | 3 | C |  |
| :---: | :---: | :---: | :---: |
| SHS 311: Hearing Science | 3 | C |  |
| SHS 367: Language Science (SB) | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours | Hours | Minimum Grade | Notes |
| SHS 375: Speech Science | 3 | C |  |
| SHS 401: Introduction to Audiology | 3 | C |  |
| SHS 465: Speech and Language Acquisition (SB) | 3 | C |  |
| Upper Division CLAS Science and Society Elective | 3 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |
| SHS 470: Developmental Speech and Language Disorders | 3 | C |  |
| SHS 496: Aural Rehabilitation | 3 | C |  |
| Upper Division CLAS Science and Society Elective | 3 | C |  |
| Elective | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| SHS 402: Clinical Methods and Treatment of Communication Disorders | 3 | C |  |
| SHS 485: Acquired Speech and Language Disorders | 3 | C |  |
| Complete 3 courses: Upper Division Elective | 9 |  |  |
| Term hours subtotal: | 15 |  |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.A A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. At At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Transborder Chicana/o \& Latina/o Studies (Media and Expressive Culture), BA

College of Liberal Arts and Sciences
Campus:Tempe
LATCLMBA

| Term 1 0-14 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Majors are expected to fulfill the College's language requirement in Spanish. In addition, all majors must demonstrate proficiency in Spanish by passing an upper division TCLS course taught in Spanish |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| LIA 194: Academic Success Seminar, Intro to Liberal Arts and Sciences | 1 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Spanish SPA language course at the intermediate level (202 or equivalent). | 4 | C |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-29 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Spanish SPA language course at the intermediate level (202 or equivalent). | 4 | C |  |
| Elective OR <br> Minor Course | 2 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 30-43 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 4 TCL 201: Transborder Society and Culture I: Interdisciplinary Approaches | 3 | C |  |
| TCL 220: Transborder Latina/o Expressive Culture ((L or HU) \& C) | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Spanish SPA language course at the intermediate level (202 or equivalent). | 4 | C |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 44-60 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 1 TCL 202: Transborder Society and Culture II: Contemporary Issues (SB \& C) | 3 | C | - Complete Spanish language proficiency by end of semester 4 |
| Media and Expressive Culture Track Course | 3 | C |  |

Second Language: Requirement satisfied through the following:

* Completion of Spanish SPA language course at the intermediate level (202 or equivalent).

| Natural Science - Quantitative (SQ) OR | 4 |  |
| :--- | :--- | :--- |
| Natural Science - General (SG) | 3 | C |
| Literacy and Critical Inquiry (L) | 3 |  |

1. Minimum 2.00 GPA ASU Cumulative.

Term hours subtotal: 17

| Term 5 61-75 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| TCL 303: Transborder Theory |  | 3 | C |  |
| TCL 332: Mexican American History Since 1900 (SB \& H \& C) OR HST 332: Mexican American History Since 1900 (SB \& H \& C) |  | 3 | C |  |
| Media and Expressive Culture Track Course |  | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| SPA Upper Division Elective OR Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| TCL 304: Transborder Research Methods |  | 3 | C |  |
| Complete 2 courses: <br> Media and Expressive Culture Track Course |  | 6 | C |  |
| Upper Division Elective OR Upper Division Minor Course |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| TCL 305: Transborder Practicum and Field Research. |  | 3 | C |  |
| Media and Expressive Culture Track Course |  | 3 | C |  |
| Complete 2 courses: <br> TCL Upper Division Elective |  | 9 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| TCL 498: Pro-Seminar |  | 3 | C |  |
| Global Awareness (G) |  | 3 |  |  |
| Complete 2 courses: <br> Upper Division Elective OR Upper Division Minor Course |  | 9 |  |  |
|  | Term hours subtotal: | 15 |  |  |

[^21]| TCL 310: Transborder Chicano/a and Latino/a Folklore of Southwest North America (HU \& C) |
| :---: |
| TCL 328: Latina/o and Latin American Religions and Cultures (HU \& C) |
| TCL 331: Mexican American History to 1900 (SB \& H \& C) |
| TCL 350: Transborder Mexican and Chicano/a Artistic Production (HU \& C \& G) |
| TCL 351: Transborder Chicano/a and Latino/a Art (HU \& C) |
| TCL 352: Chicana/o Film (C) |
| TCL 363: Transborder Mexican and Chicano/a Literature of Southwest North America ((L or HU) \& C) |
| TCL 364: Transborder Chicana/o and Mexican Literature of Southwest North America Before 1917 (L \& C) |
| TCL 370: Signs of Aliens: Semiotics of Film and Popular Culture (HU) |
| TCL 445: Transborder Latin American Short Story (L or HU) |
| TCL 446: Comparative Bilingual Latina/o Poetics ((L or HU) \& C) |
| TCL 464: Latina/o Literature ((L or HU) \& C) |
| TCL 465: Chicana/o and Latina/o History on Film (HU \& C) |
| TCL 466: Constructing the Border on Film (C) |
| TCL 470: Race, Sex, and Identity Online (HU) |
| TCL 471: Latinos In Hollywood |
| TCL 484: Internship |
| TCL 485: Chicana and Latina Writers ((L or HU) \& C) |
| TCL 488: Border Global Narratives (L \& C) |

## Notes:

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- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. Â At least one of the two courses taken from the list must be upper division.Â Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. At At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses.Â When you complete both courses, all three learning goals must be filled in order to complete the requirement.Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map

## Transborder Chicana/o \& Latina/o Studies (Transborder Community Development and Health), BA

College of Liberal Arts and Sciences
Campus:Tempe
LATCLTBA

| Term 1 0-14 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Majors are expected to fulfill the College's language requirement in Spanish. In addition, all majors must demonstrate proficiency in Spanish by passing an upper division TCLS course taught in Spanish |
| LIA 194: Academic Success Seminar or First-Year Seminar | 1 |  |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Spanish SPA language course at the intermediate level (202 or equivalent). | 4 | C |  |
| 9. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-30 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Spanish SPA language course at the intermediate level (202 or equivalent). | 4 | C |  |
| Elective OR <br> Minor Course | 3 | C |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-44 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| 1. TCL 201: Transborder Society and Culture I: Interdisciplinary Approaches | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Spanish SPA language course at the intermediate level (202 or equivalent). | 4 | C |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 1. Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 45-60 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 1. TCL 202: Transborder Society and Culture II: Contemporary Issues (SB \& C) | 3 | C | - Complete Spanish language proficiency by end of semester 4 |
| Transborder Community Development \& Health Track Course | 3 | C |  |



$$
\begin{aligned}
& \text { TCL 321: Transborder Community } \\
& \text { Development and Health } \\
& \text { TCL 323: Latino Health Issues (SB \& C) } \\
& \text { TCL 326: Health of Chicanas and Latinas (SB } \\
& \text { \& C) } \\
& \text { TCL 327: Health and Migration (SB) } \\
& \text { TCL 331: Mexican American History to } 1900 \\
& \text { (SB \& H \& C) } \\
& \text { TCL 335: Historical Studies in Race, Crime, } \\
& \text { and the Law } \\
& \text { TCL 342: Social Demographics of Latino } \\
& \text { Populations (SB \& C) } \\
& \text { TCL 373: Latina/Chicana Issues (SB \& C) } \\
& \text { TCL 410: Race, Medicine, and the Body (L) } \\
& \text { TCL 422: U.S.-Mexico Border Health } \\
& \text { TCL 424: Theory and Practice of Community } \\
& \text { Development and Health (SB) } \\
& \text { TCL 443: Political Ecology of the Border (SB } \\
& \text { \& G) } \\
& \text { TCL 444: The Ethography of Mexico and } \\
& \text { the Borderlands (SB \& G) } \\
& \text { TCL 447: Gender, Culture, and Development } \\
& \text { ((L or SB) \& G) } \\
& \text { TCL 484: Internship }
\end{aligned}
$$

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
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Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Transborder Chicana/o \& Latina/o Studies (US and Mexican Regional Immigration Policy \& Economy), BA

College of Liberal Arts and Sciences
Campus:Tempe
LATCLUBA

| Term 1 0-14 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Majors are expected to fulfill the College's language requirement in Spanish. In addition, all majors must demonstrate proficiency in Spanish by passing an upper division TCLS course taught in Spanish |
| LIA 194: Academic Success Seminar or First-Year Seminar | 1 |  |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Spanish SPA language course at the intermediate level (202 or equivalent). | 4 | C |  |
| Elective OR <br> Minor Course | 3 |  |  |
| ¢. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-30 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Spanish SPA language course at the intermediate level (202 or equivalent). | 4 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Elective OR Minor Course | 3 |  |  |

Term hours subtotal:

| Term 3 31-44 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 TCL 201: Transborder Society and Culture I: Interdisciplinary Approaches | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of Spanish SPA language course at the intermediate level (202 or equivalent). | 4 | C |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 45-60 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 4 TCL 202: Transborder Society and Culture II: Contemporary Issues (SB \& C) | 3 | C | - Complete Spanish language proficiency by end of semester 4 |
| US \& Mexican Regional Immigration Policy \& Economy Track Course | 3 | C |  |


| Second Language: Requirement satisfied through the following: <br> * Completion of Spanish SPA language course at the intermediate level (202 or equivalent). | 4 | C |  |
| :---: | :---: | :---: | :---: |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Elective OR <br> Minor Course | 2 |  |  |
| (1) Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 61-75 Credit Hours | Hours | Minimum Grade | Notes |
| TCL 303: Transborder Theory | 3 | C |  |
| TCL 314: Transborder Regional Immigration and Economy ((L or SB) \& H \& C) | 3 | C |  |
| TCL 332: Mexican American History Since 1900 (SB \& H \& C) OR HST 332: null | 3 | C |  |
| SPA Upper Division Elective OR Upper Division Elective | 3 |  |  |
| Upper Division Elective OR Upper Division Minor Course | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours | Hours | Minimum Grade | Notes |
| TCL 304: Transborder Research Methods | 3 | C |  |
| TCL Upper Division Elective | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective OR Upper Division Minor Course | 3 | C |  |
|  | 6 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |
| TCL 305: Transborder Practicum and Field Research. | 3 | C |  |
| TCL 443: Political Ecology of the Border (SB \& G) OR <br> TCL 444: The Ethnography of Mexico and the Borderlands (SB \& G) OR TCL 447: Gender, Culture, and Development ((L or SB) \& G) | 3 | C |  |
| Complete 2 courses: <br> TCL Upper Division Elective | 6 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| TCL 498: Pro-Seminar | 3 | C |  |
| Complete 2 courses: <br> US \& Mexican Regional Immigration Policy \& Economy Track Course | 6 | C |  |
| Complete 2 courses: <br> Upper Division Elective OR Upper Division Minor Course | 6 |  |  |
| Term hours subtotal: | 15 |  |  |

[^22]| TCL 331: Mexican American History to 1900 (SB \& H \& C) |
| :---: |
| TCL 335: Historical Studies in Race, Crime, and the Law |
| TCL 340: Chicana/o and Latina/o Politics and Policy (L \& C) |
| TCL 341: Policy Issues in Chicana/o and Latina/o Urban Settings (C) |
| TCL 342: Social Demographics of Latino Populations (SB \& C) |
| TCL 373: Latina/Chicana Issues (SB \& C) |
| TCL 443: Political Ecology of the Border (SB \& G) |
| TCL 444: The Ethnography of Mexico and the Borderlands (SB \& G) |
| TCL 447: Gender, Culture, and Development ((L or SB) \& G) |
| TCL 484: Internship |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. $\hat{A}$ At least one of the two courses taken from the list must be upper division. $\hat{A}$ Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement. $\hat{A}$ At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. $\hat{A}$ Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Urban Planning, BSP <br> College of Liberal Arts and Sciences <br> Campus:Tempe <br> ARPUPBSP



Term hours subtotal:
16

| Term 4 46-60 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. PUP 301: Introduction to Urban Planning (L) | 3 | C |  |
| 1. Computer/Statistics/Quantitative Applications (CS) | 3 | C |  |
| Upper Division Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. <br> (C) OR <br> Upper Division Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Complete 2 courses: Elective | 6 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 61-77 Credit Hours | Hours | Minimum Grade | Notes |
| PUP 361: Introductory Urban Planning Studio | 4 | C |  |
| PUP 424: Planning Methods | 4 | C |  |


| PUP Upper Division Elective | 3 | C |  |
| :---: | :---: | :---: | :---: |
| Upper Division CLAS Science and Society Elective | 3 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 6 78-92 Credit Hours | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| PUP 363: History of Planning | 3 | C |  |
| PUP 434: Urban Land Economics OR <br> PUP 442: Environmental Planning | 3 | C |  |
| Upper Division Related Area Course | 3 | C |  |
| Complete 2 courses: Upper Division Elective | 6 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 93-107 Credit Hours | Hours | Minimum Grade | Notes |
| PUP 432: Planning and Development Control Law OR <br> PUP 433: Zoning Ordinances, Subdivision Regulations, and Building Codes | 3 | C |  |
| PUP 436: City Structure and Planning | 3 | C |  |
| PUP Upper Division Elective | 3 | C |  |
| Upper Division Related Area Course | 3 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 108-120 Credit Hours | Hours | Minimum Grade | Notes |
| Upper Division Related Area Course | 3 | C |  |
| PUP 452: Ethics and Theory in Planning (L) | 3 | C |  |
| PUP 462: Planning Workshop II | 4 | C |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 13 |  |  |


| Related Area Course | Computer/ Statistics/ Quantitative <br> Applications Course |
| :--- | :--- |
| ECN 382: Managerial Economics | ABS 350: Applied Statistics (CS) |
| ECN 404: History of Economic Thought (SB) | CRJ 303: Statistical Analysis (CS) |
| ECN 441: Public Economics (SB) |  |
| GCU 359: Cities of the World I (SB \& G \& |  |
| GCU 495: Quantitative Methods in |  |
| Geography (CS) |  |

## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.Â A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. A At least one of the two courses taken from the list must be upper division.A Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement. Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Women and Gender Studies, BA

College of Liberal Arts and Sciences
Campus:Tempe
LAWSTBA

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 WST 100: Women, Gender, and Society (SB \& C) | 3 | C | - An SAT, ACT, Accuplacer or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam (ALEKS) determines placement into Mathematics courses <br> - ASU 101 or LIA 194 or College-specific equivalent First Year Seminar required of all freshman students <br> - Consult academic advisor for Academic Success Cluster and First Year Seminar options |
| LIA 194: Academic Success Seminar, Intro to Liberal Arts and Sciences | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Term hours subtotal: | 14 |  |  |


| Term 2 15-30 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| WST Elective | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-47 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| Related Area Course | 3 | C | - Selection of general studies courses will be determined by elective courses taken to fill the major |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Global Awareness (G) | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 4 48-61 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Minimum Grade | Notes |
| 1. WST 380: Race, Gender, and Class (SB \& C) | 3 | C |  |
| WST 377: History of American Feminist Thought (H \& C) OR WST 378: Global Feminist Theory (L \& C \& G) | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| Term hours subtotal: | 14 |  |  |


| Term 5 62-76 Credit Hours |  | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Complete 2 courses: <br> WST Upper Division Elective |  | 6 | C |  |
| Upper Division Related Area Course |  | 3 | C |  |
| Historical Awareness (H) |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 77-91 Credit Hours |  | Hours | Minimum Grade | Notes |
| WST Upper Division Elective |  | 3 | C |  |
| Upper Division Related Area Course |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 92-106 Credit Hours |  | Hours | Minimum Grade | Notes |
| WST 484: Internship |  | 3 | C |  |
| Upper Division Related Area Course |  | 3 | C |  |
| WST Upper Division Elective |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) OR Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 107-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| WST 498: Pro-Seminar |  | 3 | C |  |
| Upper Division Related Area Course |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 3 |  |  |
| Elective |  | 2 |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Women and Gender Studies Related Area Courses |  |  |  |  |
| AFH 331: Studies in African American Women Writers of Pre-Harlem Renaissance |  |  |  |  |
| AFR 375: Race, Gender and Sport (SB \& C) |  |  |  |  |
| AFR 460: Race, Gender and Media (C) |  |  |  |  |
| AFS 312: Contemporary African and African Diaspora Women |  |  |  |  |
| ALD 404: Sexuality in Mid-Life and Beyond |  |  |  |  |
| ALD 472: Women, Aging and the Life Course |  |  |  |  |
| AMS 431: Gender and Sexuality in Sports |  |  |  |  |
| APA 330: Asian Pacific American Genders and Sexualities (SB \& C) |  |  |  |  |
| ARB 341: Quran Text and Women |  |  |  |  |
| ARS 485: Women in the Visual Arts (L) |  |  |  |  |
| ASB 210: Human Sexuality: Anthropological Perspectives (SB) |  |  |  |  |
| ASB 211: Women in Other Cultures ((HU or SB) \& G) |  |  |  |  |


| ASB 440: Women in the Global Factory (SB \& G) |
| :---: |
| ASB 441: Sexuality and Culture (SB \& G) |
| COM 316: Gender and Communication (SB \& C) |
| COM 416: Gender, Race, Colonialism, and Media |
| COM 446: Performance of Literature Written by Women ((L or HU) \& C) |
| CRJ 305: Women, Crime, and Justice (C) |
| CSS 432: Issues in Chicana and Chicano Gender (C) |
| ENG 364: Women and Literature (HU) |
| ENG 454: Gender and Literature (L or HU) |
| ENG 455: Contemporary Women |
| ENG 460: Ethnic Women Writers |
| ENG 461: Women and Literature |
| ENG 462: Africana Literature |
| FAS 332: Human Sexuality (SB) |
| FAS 436: Sexuality in Mid-Life and Beyond |
| FAS 472: Women, Aging and the Life Course |
| FMS 270: Race and Gender in American Film ( $\mathrm{HU} \& \mathrm{C}$ ) |
| HPS 312: History of Women in Science and Medicine (HU or SB) |
| HST 327: Women in US History 1600 to 1880 ((HU or SB) \& C \& H) |
| HST 328: Women in US History, 1880-1980 ((HU or SB) \& C \& H) |
| HST 329: Women in 20th-Century US West ( $\mathrm{H} \& \mathrm{C}$ ) |
| HST 330: Mexican Women in the U.S. ((L or SB) \& H \& C) |
| HST 365: Women in Europe, 1750 to Present ((L or HU or SB$) \& \mathrm{H})$ |
| HST 377: Women in Colonial Latin America (H) |
| HST 378: Latin American Women: The National Period (SB \& G \& H) |
| HST 415: Unequal Sisters/Women-Pol/Cult ((L or SB) \& H \& C) |
| HST 464: Women in Europe to 1750 (H) |
| HST 465: Women in Europe, 1750 to Present ((L or HU or SB) \& H) |
| HTY 360: Women and Science (L \& H) |
| IAP 310: Women in Art |
| IAS 310: Women in Art |
| JUS 329: Domestic Violence (SB) |
| JUS 415: Gender and International Development (L \& G) |
| JUS 420: Women, Work, and Justice ((L or SB) \& C) |
| JUS 422: Women, Law, and Social Control |
| JUS 425: Race, Gender, and Justice ((L or SB) \& C) |
| JUS 460: Feminism and Justice (C) |

```
KIN 441: Physiology of Women in Sport (L)
LSC 363: Genes, Race, Gender, and Society
(L)
MCO 460: Race, Gender, and Media (C)
MUS 410: History of Women in Music (HU
& C & H)
PGS 385: Psychology of Gender
POS 435: Women and Politics (SB & C)
POS 436: Gender, Sexuality, Nation-States
POS 437: Women, Power, and Politics (G)
PSY 369: Biology of Human Sexuality
PUP 445: Women and Environments (C)
REL 369: Women in Islam
REL 373: Women in Judaism
REL 390: Women and Religion (HU & G)
REL 393: Religion and Sexuality (HU)
REL 396: Women in the Bible
SOC 315: Courtship and Marriage (SB)
SOC 417: Family Violence (SB)
SOC 424: Women and Health (SB)
SOC 464: Gender and Society (SB & C)
TCL 270: Race and Gender in American Film
(HU & C)
WSH OR WST Upper Division Elective
```


## Notes:

- All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
- All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement. $\hat{A}$ A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety.Â At least one of the two courses taken from the list must be upper division.A Science and society courses cannot be used to also fill core general studies requirements such as $\mathrm{SB}, \mathrm{HU}, \mathrm{SQ}$ or SG . Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.Â At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. $\hat{A}$ When you complete both courses, all three learning goals must be filled in order to complete the requirement.Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

Bachelor of Applied Science Degree
2011-2012 Curriculum Check Sheet
School of Letters and Sciences

| Student Name | ID. Number |
| :---: | :---: |
| A.A.S. Degree | Date A.A.S. Degree Granted |
| A.A.S. Degree Granting Institution | ASU Catalog Year 2011-2012 |
| B.A.S. Academic Department Technical Communication | Advisor |
| Number of Upper Division Transfer Credits | Expected Graduation Date |
| Institution of Transfer Course Work (Upper Division Only) |  |

## General Studies Sequence (19 Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |
| Science - ASC 325 | 4 |  |  |  |
| Upper-division Literacy [L] | 3 |  |  |  |
| Upper-division Humanities [HU] and [H] [C] | 3 |  |  |  |
| Upper-division Social Science [SB] | 3 |  |  |  |
| General Studies [HU or SB] and [G] | 3 |  |  |  |
| Sub | 19 | Hrs. |  |  |

## B.A.S. Area Core (15 Hours)

| ASU |  |  |  |  |  | Transfer | Transfer From | Grade |
| :--- | :---: | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| TWC 301 General Principles of Multimedia Writing | 3 |  |  |  |  |  |  |  |
| TWC 401 Principles of Technical Communication | 3 |  |  |  |  |  |  |  |
| TWC 347 Written Communication for Managers | 3 |  |  |  |  |  |  |  |
| STP 420 Introductory Applied Statistics | 3 |  |  |  |  |  |  |  |
| TWC 421 Principles of Writing with Technology | 3 |  |  |  |  |  |  |  |
| Sub Total 15 Hrs. |  |  |  |  |  |  |  |  |

Technical Writing and Communication (20 Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| TWC 411 Principles of Visual Communication | 3 |  |  |  |
| TWC 431 Principles of Technical Editing | 3 |  |  |  |
| TWC 44X Genre Course | 3 |  |  |  |
| TWC 45X Information Series Course | 3 |  |  |  |
| TWC 499 Individual Instruction | 2 |  |  |  |
| TWC 3/4XX Elective | 3 |  |  |  |
| TWC 3/4XX Elective | 3 |  |  |  |
| Sub Total | 20 | Hrs. |  |  |
| Assignable Credits (6 Hours) | ASU | Transfer | Transfer From | Grade |
|  | 3 |  |  |  |
|  | 3 |  |  |  |


| BAS Degree <br> Bummary <br> Sum |
| :--- |
| \begin{tabular}{\|l|c|}
\hline
\end{tabular}Credit <br> Hours |
| Degree Block Transfer |
| General Studies |
| B.A.S. Area Core |
| Technical Writing |
| Assignable Credits |

Total (120 Hours Minimum)

## Advisor Comments

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Total Upper Division Hours $\qquad$

Total ASU Resident Hours $\qquad$

Student Signature

Advisor/Chair Signature
Date


## 2011-2012 Major Map American Studies, BA

New College of Interdisciplinary Arts and Sciences
Campus:West WUE
ASAMSBA

| Term 1 0-17 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ASU 101: The ASU Experience |  | 1 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses. <br> - ASU Math Placement Exam score determines placement in Mathematics course. <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| MAT 142: College Mathematics (MA) |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Natural Science - Quantitative (SQ) |  | 4 |  |  |
|  | Term hours subtotal: | 17 |  |  |
| Term 2 18-33 Credit Hours Critical course signified by ${ }^{\text {- }}$ |  | Hours | Minimum Grade | Notes |
| 4 ENG OR AMS OR HST Elective |  | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) |  | 4 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 3 34-48 Credit Hours Critical course signified by ${ }^{\text {a }}$ |  | Hours | Minimum Grade | Notes |
| Computer/Statistics/Quantitative Applications (CS) |  | 3 |  |  |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Complete 2 courses: Elective |  | 6 |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |  |
| 1. Complete First-Year Composition requirement. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 4 49-63 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| 4 ENG OR AMS OR HST Elective |  | 3 | C |  |
| AMS 301: Introduction to American Studies (L) |  | 3 | C |  |
| Global Awareness (G) |  | 3 |  |  |
| Upper Division Focus Area |  | 3 | C |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 5 64-78 Credit Hours |  | Hours | Minimum Grade | Notes |
| Focus Area |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |

- If AMS 310 is chosen, then

| Upper Division Language and Cultures AND <br> Cultural Diversity in the U.S. (C) OR <br> Global Awareness (G) | 3 | C |  |
| :--- | :--- | :---: | :---: |
| AMS 330: Documenting American Lives (HU \& C) | 3 | C |  |
| AMS 310: History of American Systems to 1865 (H) OR <br> AMS 320: American Cultural History I (SB \& H) |  | 3 | C |

upper Division Language and Cultures AND
Cultural Diversity in the U.S. (C) OR

AMS 311 will be taken in a subsequent semester to complete the set.

- If AMS 320 is chosen, then AMS 321 will be taken in a subsequent semester to complete the set.

| Term 6 79-93 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| AMS 311: History of American Systems Since 1865 (H) OR AMS 321: American Cultural History II (H) |  | 3 | C | - If AMS 310 was completed in a previous term, AMS 311 will be taken to complete the set. <br> - If AMS 320 was completed in a previous term, AMS 321 will be taken to complete the set. |
| Upper Division Focus Area |  | 3 | C |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Focus Area |  | 3 | C |  |
| Upper Division Elective |  | 6 |  |  |
| Upper Division Language and Cultures AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) |  | 3 | C |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Focus Area |  | 3 | C |  |
| HST 484: Internship OR <br> HST 498: Pro-Seminar OR <br> HST 499: Individualized Instruction |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 12 |  |  |


| Focus Area | Focus Area Upper division |
| :---: | :---: |
| ENG Lower Division Elective | ENG Upper Division Elective |
| HIS Lower Division Elective | HIS Upper Division Elective |
| HST Lower Division Elective | HST Upper Division Elective |
| AMS Lower Division Elective | AMS Upper Division Elective |
| JMC Lower Division Elective | JMC Upper Division Elective |

## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a " C ".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

# Major Map: Applied Computing - <br> Bachelor of Science (B.S.) 

New College of Interdisciplinary Arts and Sciences | Catalog Year: 2011-2012

|  |  |  | Competed Transfer Pathway: |  | Completed General Education: $\square$ AGEC $\square$ IGETC/CSUGE $\square$ None |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\square$ MAPP | $\square$ ATP $\square$ None |  |
| Course Subject and Title (courses in bold/shading are critical) | Hrs. | $\begin{aligned} & \text { Upper } \\ & \text { Division } \\ & \hline \end{aligned}$ | Transfer Course/Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| TERM ONE: 0-15 CREDIT HOURS |  |  |  |  |  |
| ASU 101: The ASU Experience | 1 | $\square$ |  |  | - ASU 101 is for ASU freshman students only. Not required of transfer students <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course |
| ENG 101 or 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or 108: English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| ACO 101 (CS): Intro to Computer Science | 3 | $\square$ |  | Grade of C |  |
| Historical Awareness (H) | 3 | $\square$ |  |  |  |
| General Elective or MAT 117 (MA) or MAT 170 if needed | 3 | $\square$ |  |  |  |
| General Elective | 3 | $\square$ |  |  |  |
| TERM TWO: 16-30 CREDIT HOURS |  |  |  |  |  |
| ACO 102 (CS): Principles of Computer Science | 3 | $\square$ |  | Grade of C |  |
| MAT 210 (MA): Brief Calculus or MAT270 Calculus\& Analytical Geometry I (MA) | 3 | $\square$ |  | Grade of C |  |
| ENG 101 or 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or 108: English for Foreign Students | 3 | $\square$ |  |  |  |
| Global Awareness (G) | 3 | $\square$ |  |  |  |
| Science Quantitative: (SQ) | 4 | $\square$ |  |  |  |
| TERM THREE: 31-45 CREDIT HOURS |  |  |  |  |  |
| ACO 201 (CS): Data Structures and Algorithms | 3 | $\square$ |  | Grade of C | - Complete First-Year Composition requirement <br> - Complete Mathematics (MA) requirement |
| MAT 243: Discrete Mathematical Structures | 3 | $\square$ |  | Grade of C |  |
| Humanities/Fine Arts (HU) | 3 | $\square$ |  |  |  |
| Social Behavioral Science (SB) | 3 | $\square$ |  |  |  |
| Cultural Diversity (C) | 3 | $\square$ |  |  |  |
| TERM FOUR: 46-60 CREDIT HOURS |  |  |  |  |  |
| ACO 210 (CS): Introduction to Systems Programming | 3 | $\square$ |  | Grade of C | - Students must choose one of the following concentrations by the end of the forth semester: Database Systems, Digital Media \& Graphic Design, or Network and Distributed Processing. |
| ACO 220 (CS): Introduction to Database Systems | 3 | $\square$ |  | Grade of C |  |
| STP326: Intermediate Probability | 3 | 区 |  | Grade of C |  |
| Literacy \& Critical Inquiry (L) | 3 | $\square$ |  |  |  |
| Humanities/Fine Arts (HU) | 3 | $\square$ |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition


## Additional Notes:

## 2011-2012 Major Map Applied Mathematics, BS

New College of Interdisciplinary Arts and Sciences
Campus:West WUE
ASMATBS



| Term 6 76-93 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| STP 420: Introductory Applied Statistics (CS) |  | 3 | C |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) |  | 6 | C |  |
| Upper Division Cultural Diversity in the U.S. (C) OR Upper Division Historical Awareness (H) OR Upper Division Global Awareness (G) |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 18 |  |  |
| Term 7 94-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Capstone Course |  | 3 | C |  |
| Upper Division Applied Math Elective |  | 3 | C |  |
| Cultural Diversity in the U.S. (C) OR Historical Awareness (H) OR Global Awareness (G) |  | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Capstone Course |  | 3 | C |  |
| Upper Division Applied Math Elective |  | 3 | C |  |
| Cultural Diversity in the U.S. (C) OR Historical Awareness (H) OR Global Awareness (G) |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 12 |  |  |
| Applied Math Elective |  |  |  |  |
| MAT 419: Introduction to Linear Optimization (CS) |  |  |  |  |
| MAT 450: Mathematical Models in Biology |  |  |  |  |
| MAT 452: Introduction to Chaos and Nonlinear Dynamics |  |  |  |  |
| MAT 462: Applied Partial Differential Equations |  |  |  |  |

## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

Total Hours: 120
Upper Division Hours: 45 minimum

| Major GPA: 2.00 minimum | General Studies Core Requirements: | - Cultural Diversity in the U.S. (C) |
| :--- | :--- | :--- |
| Cumulative GPA: 2.00 minimum | - Literacy and Critical Inquiry (L) | - Global Awareness (G) |
| Total hrs at ASU: 30 minimum | - Mathematical Studies (MA) | • Historical Awareness (H) |
| Hrs Resident Credit for | - Computer/Statistics/Quantitative Applications |  |
| Academic Recognition: 56 minimum | (CS) |  |
| Total Community College Hrs: 64 maximum | - Humanities, Fine Arts and Design (HU) |  |
|  | - Social and Behavioral Sciences (SB) |  |
|  | - Natural Science - Quantitative (SQ) |  |
|  | - Natural Science - General (SG) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year.

Bachelor of Applied Science
Catalog Year: 2011-2012


Minors offered at ASU at the West campus include: American Studies, Communication Studies, English, Ethnic Studies, Film and Video Studies, History, Interdisciplinary Arts \& Performance, Interdisciplinary Organizational Studies, Life Sciences, Mathematics, Philosophy, Political Science, Psychology, Public Relations \& Strategic Communication, Religious Studies, Social \& Behavioral Sciences, Socio-cultural Anthropology, Sociology, Spanish, and Women's Studies. See catalog for more information. * Must be met by the $24^{\text {th }}$ hour or student will be blocked from registering.

## 2011-2012 Major Map Communication, BA <br> New College of Interdisciplinary Arts and Sciences <br> Campus:West WUE <br> ASCOMMBA

| Term 1-16 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 COM 100: Introduction to Human Communication (SB) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ASU 101: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Elective | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
|  | 16 |  |  |
| Term 2 17-32 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Elective | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
|  | 16 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 1 COM 225: Public Speaking (L) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Global Awareness (G) | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Elective | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Complete Mathematics (MA) requirement. |  |  |  |


| Term 4 49-63 Credit Hours Critical course signified by | Hours | Minimum <br> Grade |  |
| :--- | :--- | :--- | :--- |
| COM 207: Introduction to Communication Inquiry | 3 | C | Notes |
| Historical Awareness (H) | 3 |  |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Complete 2 courses: <br> Elective | Term hours subtotal: | 15 |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
|  | Hours | Minimum <br> Grade |  |
| Term 5 $64-78$ Credit Hours |  |  |  |


| COM 308: Advanced Research Methods in Communication (L) | 3 | C |  |
| :---: | :---: | :---: | :---: |
| Complete 2 courses: COM Upper Division Elective | 6 | C |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) | 3 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| COM 309: Rhetorical, Interpretive, and Critical Methods in Communication | 3 | C |  |
| COM 4** Elective | 3 | C |  |
| Complete 2 courses: COM Upper Division Elective | 6 | C |  |
| Upper Division Social and Behavioral Sciences (SB) OR Upper Division Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: COM 4** Elective | 6 | C |  |
| Upper Division Elective | 3 |  |  |
| Upper Division Language \& Cultures (see notes) OR Cultural Diversity in the U.S. (C) OR Global Awareness (G) | 3 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> COM 4** Elective | 6 | C |  |
| Complete 2 courses: Upper Division Elective | 6 |  |  |
| Term hours subtotal: | 12 |  |  |

## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of "C" or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

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Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## Hrs Resident Credit for

Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## 2011-2012 Major Map <br> English, BA

New College of Interdisciplinary Arts and Sciences
Campus:West WUE
ASENGBA

| Term 1 0-14 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ASU 101: The ASU Experience | 1 |  |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
|  | Term hours subtotal: 14 |  |  |


| Term 2 15-30 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 1 ENG 200: Critical Reading and Writing About Literature (L or HU) | 3 | C |  |
| ENG Elective | 3 | C |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Elective | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Complete Mathematics (MA) requirement. |  |  |  |
| Literature and Culture before 1860 Course | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 46-60 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ - | Hours | Minimum Grade | Notes |
| 1. ENG Elective | 3 | C |  |
| Literature and Culture after 1860 Course | 3 | C |  |
| ENG Upper Division Elective AND Upper Division Humanities, Fine Arts and Design (HU) | 3 | C |  |
| Global Awareness (G) | 3 |  |  |
| Elective AND <br> Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 61-75 Credit Hours | Hours | Minimum Grade | Notes |
| Literary Theory and Interdisciplinary Studies Course | 3 | C |  |
| ENG Upper Division Elective AND <br> Upper Division Humanities, Fine Arts and Design (HU) | 3 | C |  |


| ENG Upper Division Elective AND <br> Upper Division Literacy and Critical Inquiry (L) |  | 3 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| Ethnicity, Gender and Postcolonality Course |  | 3 | C |  |
| ENG Upper Division Elective AND <br> Upper Division Humanities, Fine Arts and Design (HU) |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| Rhetoric, Writing and Linguistics Course |  | 3 | C |  |
| ENG Upper Division Elective |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| Complete 3 courses: <br> ENG Upper Division Elective |  | 9 | C |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |


| Literature and Culture before 1860 | Literature and Culture after 1860 | Ethnicity, Gender and Postcolonality |
| :---: | :---: | :---: |
| ENG 201: World Literature (HU \& H \& G) | ENG 204: Introduction to Contemporary <br> Literature (HU) | ENG 201: World Literature (HU \& H \& G) |
| ENG 202: World Literature (HU \& H) |  | ENG 202: World Literature (HU \& H) |
| ENG 221: Survey of English Literature (HU) | ENG 222: Survey of English Literature (HU \& H) | ENG 317: Cross-Cultural Writing ((L or HU) |
| ENG 241: Literatures of the United States to 1860 (HU) | ENG 242: Literatures of the United States, 1860 to Present (HU) | nnic Literature ((L or |
| ENG 303: Classical Backgrounds of English Literature (HU) | ENG 329: 19th-Century British Fiction (L or HU) |  |
|  |  | ENG 334: The American Southwest in |
| ENG 305: Classical and Biblical Backgrounds to Literature | ENG 330: 19th-Century British Poetry, Victorian Poetry | ENG 359: American Indian Literature ((L or |
| ENG 315: Medieval Literature in Translation, Sin and Sinners in Western Culture | ENG 342: 20th-Century British and Irish Literature (HU) |  |
|  |  | ENG 364: Women and Literature (HU) |
| ENG 321: Shakespeare (L or HU) | ENG 353: African American Literature: | ENG 363: Transborder Mexican and |
| ENG 328: The Novel to Jane Austen (HU \& H) | $((\mathrm{L}$ or HU) \& C) | Chicano/a Literature of Southwest North America ((L or HU) \& C) |
|  | ENG 354: African American Literature: Harlem Renaissance to the Present ((L or HU) \& C) | ENG 420: Multicultural Autobiographies ((L) |
| ENG 356: The Bible as Literature (HU) |  | or HU ) \& C) |
| ENG 416: Chaucer in Middle English, The Canterbury Tales, Troilus and Criseyde | ENG 359: American Indian Literature ((L or HU) \& C) | ENG 454: Gender and Literature (L or HU) |
|  |  | ENG 455: Contemporary Women Writers |
| ENG 418: Renaissance Literature (L or HU) | ENG 386: American Gothic | ENG 460: Ethnic Women Writers |
| ENG 421: Studies in Shakespeare, Shakespeare |  | ENG 462: Africana Literature (HU \& G) |
| ENG 423: Renaissance Drama, Revenge Tragedies |  | ENG 463: African American Literature |


| Rhetoric, Writing and Linguistics | Literary Theory and Interdisciplinary Studies |
| :---: | :---: |
| ENG 210: Introduction to Creative Writing, Literature, Mixed Genre, Playwriting | ENG 230: Introduction to Film Studies (L or HU) |
| ENG 213: Introduction to the Study of Language | ENG 244: Introduction to Researching Family History |
| ENG 214: English Grammar and Usage | ENG 245: American Idols: Empowerment and Social Change, Popular Culture Issues, Pulp Fiction |
| ENG 215: Strategies of Academic Writing (L) |  |
| ENG 216: Persuasive Writing on Public Issues (L) | ENG 334: The American Southwest in Literature and Film. ((L or HU) \& C) |
| ENG 217: Writing Reflective Essays (L) | ENG 400: History of Literary Criticism, Plato to the Present |
| ENG 218: Writing About Literature (L or $\mathrm{HU})$ | ENG 490: Literary Forms: Theory and Practice in Poetry |
| ENG 219: Newspaper Production (L) | ENG 491: Literary Forms: Theory and Practice in Fiction |
| ENG 243: Introduction to Writing Family <br> History (L) |  |
| ENG 287: Beginning Creative Writing Workshop in Poetry |  |
| ENG 288: Beginning Creative Writing Workshop in Fiction |  |
| ENG 301: Writing for the Professions (L) |  |
| ENG 302: Business Writing (L) |  |
| ENG 307: Writing Science Fiction |  |
| ENG 310: Intermediate Creative Writing, Mixed Genre, Playwriting, Screenwriters |  |
| ENG 311: Persuasive Writing (L) |  |
| ENG 312: English in its Social Setting (L or HU or SB ) |  |
| ENG 313: Phonology and Morphology |  |
| ENG 314: Modern Grammar |  |
| ENG 317: Cross-Cultural Writing ((L or HU) \& G) |  |
| ENG 323: Rhetoric and Grammar (L) |  |
| ENG 368: Art of the Personal Essay (L) |  |
| ENG 374: Technical Editing |  |
| ENG 412: Creative Nonfiction |  |
| ENG 413: History of English Language (HU) |  |
| ENG 420: Multicultural Autobiographies ((L or HU ) \& C) |  |
| ENG 472: Rhetorical Studies (L) |  |

## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Communication, BS <br> New College of Interdisciplinary Arts and Sciences <br> Campus:West WUE <br> ASCOMMBS



Term hours subtotal:
16

| Term 4 49-63 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. COM 207: Introduction to Communication Inquiry | 3 | C |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Historical Awareness (H) | 3 |  |  |
| Complete 2 courses: <br> Elective | 6 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 15 |  |  |
|  |  | Minimum |  |


| Term 5 64-78 Credit Hours | Hours | Grade | Notes |
| :---: | :---: | :---: | :---: |
| COM 308: Advanced Research Methods in Communication (L) | 3 | C |  |
| Complete 2 courses: COM Upper Division Elective | 6 | C |  |
| CRJ 303: Statistical Analysis (CS) OR <br> POS 401: Political Statistics (CS) OR <br> PSY 330: Statistical Methods (CS) OR <br> SBS 304: Social Statistics I (CS) OR <br> SBS 404: Social Statistics II: Multivariate Analysis (CS) OR <br> STP 420: Introductory Applied Statistics (CS) | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours | Hours | Minimum Grade | Notes |
| COM 309: Rhetorical, Interpretive, and Critical Methods in Communication | 3 | C |  |
| COM 4** Elective | 3 | C |  |
| Complete 2 courses: COM Upper Division Elective | 6 | C |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: COM 4** Elective | 6 | C |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: COM 4** Elective | 6 | C |  |
| Upper Division Elective | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 12 |  |  |

## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

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Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

| Total hrs at ASU: 30 minimum | - Mathematical Studies (MA) |  |
| :--- | :--- | :--- |
| Hrs Resident Credit for | - Computer/Statistics/Quantitative Applications | First-Year Composition |
| Academic Recognition: 56 minimum | (CS) |  |
| Total Community College Hrs: 64 maximum | - Humanities, Fine Arts and Design (HU) |  |
|  | - Social and Behavioral Sciences (SB) |  |
|  | - Natural Science - Quantitative (SQ) |  |
|  | - Natural Science - General (SG) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Ethnicity, Race, First Nations Studies, BA

New College of Interdisciplinary Arts and Sciences
Campus:West WUE
ASETHBA

| Term 1 0-16 Credit Hours | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ASU 101: The ASU Experience | 1 |  |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-32 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 ETH 100: Introduction to Ethnic Studies (SB \& C) | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Elective | 3 |  |  |
| Upper Division Elective | 6 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 49-63 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Minimum Grade | Notes |
| ETH 300: Principles of Ethnic Studies (C) OR <br> ETH 310: Research Methods in Ethnic, Racial, and First Nations Populations (SB) OR ENG 317: Cross-Cultural Writing ((L or HU) \& G) | 3 | C |  |
| Cluster Course | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Historical Awareness (H) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 64-78 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| ETH 300: Principles of Ethnic Studies (C) OR <br> ETH 310: Research Methods in Ethnic, Racial, and First Nations Populations (SB) OR ENG 317: Cross-Cultural Writing ((L or HU) \& G) | 3 | C |  |
| Career Course (see Advisor) | 3 | C |  |


| Cluster Course |  | 3 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| Upper Division Elective |  | 3 | C |  |
| Upper Division Language \& Cultures (see no Cultural Diversity in the U.S. (C) OR Global Awareness (G) | s) AND | 3 |  |  |
| Term hours subtotal: |  | 15 |  |  |
| Term 6 79-93 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| ETH 300: Principles of Ethnic Studies (C) OR <br> ETH 310: Research Methods in Ethnic, Racial, and First Nations Populations (SB) OR ENG 317: Cross-Cultural Writing ((L or HU) \& G) |  | 3 | C |  |
| Career Course (see Advisor) |  | 3 | C |  |
| Cluster Course |  | 3 | C |  |
| Upper Division Cluster Course |  | 3 | C |  |
| Upper Division Language \& Cultures (see not Cultural Diversity in the U.S. (C) OR Global Awareness (G) | s) AND | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| Career Course (see Advisor) |  | 3 | C |  |
| Cluster Course |  | 3 | C |  |
| Upper Division Cluster Course |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective | Term hours subtotal: | 6 |  |  |
|  |  | 15 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| ETH 484: Internship |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Cluster Course |  | 6 | C |  |
| Upper Division Elective |  | 3 |  |  |
|  |  | 12 |  |  |
| Community \& Policy Matters Cluster List | Transnational Matters Cluster List | Literacy Matters Cluster Lis |  |  |
| AMS 327: Regional Cultures | ASB 340: Migration and Culture (SB \& G) | ENG 353: African American Literature: Beginnings through the Harlem Renaissance ((L or HU) \& C) |  |  |
| AMS 428: Chicano Cultures in the Southwest (SB) | ASB 440: Women in the Global Factory (SB \& G) |  |  |  |  |  |
| ASB 442: Urban Anthropology (SB) | HIS 454: History of Genocide (G \& H) | ENG 354: African American Literature: Harlem Renaissance to the Present ((L or HU) \& C) |  |  |
| HST 331: Mexican American History to 1900 (SB \& H \& C) | POL 430: Race and Politics in the Americas (SB) | ENG 359: American Indian Literature ((L or $\mathrm{HU}) \& \mathrm{C})$ |  |  |
| HST 337: American Indian History to 1900 ((HU or SB) \& C \& H) | SOC 324: Work and the Workplace (SB \& H) | ENG 363: Transborder Mexican and Chicano/a Literature of Southwest North |  |  |
| IAS 407: Environmental Philosophy and Policy (L or HU) | WST 390: Women and Religions (HU \& G) | Chica <br> Amer | iterature of S or HU ) \& C |  |
|  | WST 475: Women of the Diaspora across Cultures (HU) | ENG 460: Ethnic Women Writers |  |  |
| PHI 407: Environmental Philosophy and Policy (L or HU) |  | ENG | fricana Liter |  |
| POL 320: Latino Politics (SB \& C) |  | ENG | frican Ameri |  |
| SOC 270: Racial and Ethnic Relations (SB \& C) |  | IAP 464: Media and Diversity |  |  |
|  |  | WST 467: Ethnic Women Writers (HU \& C) |  |  |
| SOC 370: Production, People, and Environments (SB) |  |  |  |  |
| WST 300: Women and Gender in Contemporary Society (SB \& C) |  |  |  |  |
| WST 398: Gender, Race and Class |  |  |  |  |
| Identity Matters Cluster List |  |  |  |  |

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AMS 330: Documenting American Lives (HU
& C)
ENG 420: Multicultural Autobiographies ((L
or HU) & C)
ENG 476: Oral Traditions
ETH 100: Introduction to Ethnic Studies (SB
& C)
IAS 220: Psychology, Multicultural
Narratives, and Religion ((L or HU) & C)
IAS 420: Multicultural Autobiographies ((L
or HU) & C)
SBS 301: Cultural Diversity ((L or SB) & C)
SBS 410: Topics in Identity/Difference
WST 370: Chronicling Women's Lives (HU
& C)
WST 473: Latina/Chicana Representation (SB
& C)
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## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> History, BA

New College of Interdisciplinary Arts and Sciences
Campus:West WUE
ASHISBA


| Term 5 64-78 Credit Hours |  | Hours | Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Non-US Non-European |  | 3 | C |  |
| Related Area Course |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours |  | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> HST Upper Division Elective |  | 6 | C |  |
| Related Area Course |  | 3 | C |  |
| Elective |  | 3 |  |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| HST Upper Division Elective |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Related Area Course |  | 6 | C |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| HST 498: Pro-Seminar AND <br> Upper Division Literacy and Critical Inquiry (L) |  | 3 | C |  |
| Upper Division Related Area Course |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 12 |  |  |
| Related Area Courses |  |  |  |  |
| AMS Elective |  |  |  |  |
| ENG Elective |  |  |  |  |
| ETH Upper Division Elective |  |  |  |  |
| HIS OR HST Elective |  |  |  |  |
| REL Elective |  |  |  |  |
| SPA Upper Division Elective |  |  |  |  |
| PHI Elective |  |  |  |  |

## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year

## 2011-2012 Major Map Integrative Studies, BA

New College of Interdisciplinary Arts and Sciences
Campus:West WUE
ASIASBA

| Term 1 0-16 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ASU 101: The ASU Experience |  | 1 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or college specific equivalent First Year Seminar required of all freshman students |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| MAT 142: College Mathematics (MA) |  | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) |  | 3 |  |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 2 17-32 Credit Hours |  | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Historical Awareness (H) |  | 3 |  |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Natural Science - Quantitative (SQ) |  | 4 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 3 33-47 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Literacy and Critical Inquiry (L) |  | 3 | C |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Elective |  | 6 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 4 48-63 Credit Hours |  | Hours | Minimum Grade | Notes |
| IAS 300: Adult Career Development (L or SB) |  | 3 | C |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) |  | 4 |  |  |
| Global Awareness (G) |  | 3 |  |  |
| Elective |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 5 64-78 Credit Hours |  | Hours | Minimum Grade | Notes |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Upper Division Ethical Reflection Course |  | 3 | C |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) |  | 3 | C |  |
| Upper Division Elective |  | 6 |  |  |


| Term 6 79-93 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Upper Division Diverse Identities Course | 3 | C |  |
| Upper Division Area of Concentration Course | 6 | C |  |
| Upper Division Elective | 3 |  |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours | Hours | Minimum Grade | Notes |
| Upper Division Scientific and Mathematical Perspectives Course | 3 | C |  |
| AMS OR ENG OR ETH OR HST OR IAP OR IAS OR PHI OR REL OR SPA OR WST Upper Division Elective | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Upper Division Area of Concentration Course | 6 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| HON 493: Honors Thesis (L) OR <br> IAS 484: Internship OR <br> IAS 493: Honors Thesis (L) OR <br> IAS 499: Individualized Instruction | 3 | C |  |
| Upper Division Secular and Sacred Worldviews Course | 3 | C |  |
| Area of Concentration Course | 6 | C |  |
| Term hours subtotal: | 12 |  |  |


| Ethical Reflection Course List | Scientific and Mathematical Perspectives Course List | Secular and Sacred Worldviews Course List |
| :---: | :---: | :---: |
| IAS 406: Moral Dilemmas ( L or HU) |  | IAS 430: Science and Religion (L or HU) |
| IAS 408: Feminist Ethics (HU) | BIO 301: Field Natural History (SG) | PHI 318: Philosophy of Religion (HU) |
| IAS 409: Eco-Community Ethics (HU) | IAS 340: Bioethics (HU) |  |
|  | IAS 407: Environmental Philosophy and Policy (L or HU) | REL 300: Research, Writing, and Thinking in Religion and Applied Ethics (L or HU) |
| PHI 306: Applied Ethics (HU) |  | REL 305: Ritual, Symbol, and Myth (L or $\mathrm{HU})$ |
| PHI 324: Existential Ethics (HU) | IAS 410: Evolution of Ideas (L or HU) |  |
| PHI 360: Business and Professional Ethics (HU) | IAS 411: History and Philosophy of Mathematics (HU \& H) | REL 310: Western Religious Traditions (HU \& H) |
| PHI 406: Moral Dilemmas (L or HU) | IAS 415: Life in the Universe | REL 320: American Religious Traditions (HU \& C \& H) |
| PHI 408: Feminist Ethics (HU) | IAS 416: Black Holes and Beyond |  |
| PHI 409: Eco-Community Ethics (HU) | LSC 301: Life Sciences: History and Method (SG) | REL 321: Religion in America (HU \& C \& H) |
|  | LSC 361: Human Sexual Biology | REL 345: Asian Religious Traditions (HU \& G) |
|  | LSC 362: The Human Environment | REL 381: Religion and Moral Issues (L or HU) |
|  | MAT 411: History and Philosophy of Mathematics (HU \& H) | REL 390: Women and Religion (HU \& G) |
|  | PHI 340: Bioethics (HU) | REL 401: Sacred Scriptures and Social Choices (HU \& G) |
|  | PHI 407: Environmental Philosophy and Policy (L or HU) | REL 420: Religion in American Life and Thought (HU) |
|  | SBS 304: Social Statistics I (CS) |  |
| Diverse Identities Course List |  |  |
| AMS 330: Documenting American Lives (HU \& C) |  |  |
| ENG 317: Cross-Cultural Writing ((L or HU) \& G) |  |  |

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ENG 420: Multicultural Autobiographies ((L
or HU) & C)
ENG 477: World Literature ((L or HU) & G)
ETH 300: Principles of Ethnic Studies (C)
HST 338: American Indian History since
1900 ((HU or SB) & C & H)
HST 415: Unequal Sisters/Women-Pol/Cult
((L or SB) & H & C)
IAS 305: Work and Identity (SB)
IAS 420: Multicultural Autobiographies ((L
or HU) & C)
IAS 477: World Literature ((L or HU) & G)
WST 333: Critical Perspectives on Sexuality
(SB & C)
WST 376: Feminist Theory (H & C)
WST 380: Race, Gender and Class (SB & C)
WST 430: Gender on the Borderlands (SB &
G)
WST 467: Ethnic Women Writers (HU & C)
WST 473: Latina/Chicana Representation (SB
& C)
WST 483: Women Writers Across Cultures
(HU & G)
```


## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Interdisciplinary Arts \& Performance, BA

New College of Interdisciplinary Arts and Sciences
Campus:West WUE
ASIAPBA

| Term 1 0-16 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ASU 101: The ASU Experience | 1 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| IAP 101: Art, Artist, and Culture (HU) OR <br> IAP 102: Foundations I: Performance Techniques and Composition OR <br> IAP 103: Foundations I: Interdisciplinary Digital Media OR <br> IAP 104: Foundations I: Fundamentals of Sound Art OR <br> IAP 105: Foundations I: Fundamentals of Interdisciplinary Art OR <br> IAP 294: Special Topics | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Historical Awareness (H) | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-31 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| IAP 101: Art, Artist, and Culture (HU) OR <br> IAP 102: Foundations I: Performance Techniques and Composition OR <br> IAP 103: Foundations I: Interdisciplinary Digital Media OR <br> IAP 104: Foundations I: Fundamentals of Sound Art OR <br> IAP 105: Foundations I: Fundamentals of Interdisciplinary Art OR <br> IAP 294: Special Topics | 3 | C |  |
| Natural Science - Quantitative (SQ) | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| IAP 201: Introduction to Interdisciplinary Arts (HU) OR IAP 202: Perspectives on Interdisciplinary Arts and Performance | 3 | C |  |
| Complete 2 courses: <br> IAP 101: Art, Artist, and Culture (HU) OR <br> IAP 102: Foundations I: Performance Techniques and Composition OR <br> IAP 103: Foundations I: Interdisciplinary Digital Media OR <br> IAP 104: Foundations I: Fundamentals of Sound Art OR <br> IAP 105: Foundations I: Fundamentals of Interdisciplinary Art OR <br> IAP 294: Special Topics | 6 | C |  |
| $\begin{aligned} & \text { Natural Science - General (SG) OR } \\ & \text { Natural Science - Quantitative (SQ) } \end{aligned}$ | 4 |  |  |
| Elective | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 48-62 Credit Hours | Hours | Minimum Grade | Notes |
| IAP 304: Traditions of the Avant-Garde and Experimental Art (L or HU) OR IAP 305: 20th and 21st Century Art, Performance, and Media (L or HU) | 3 | C |  |
| IAP 325: Sound Performance: Exploring Alternative Performance Groups | 3 | C |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |


| Global Awareness (G) | 3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Term hours subtotal: | 15 |  |  |
| Term 5 63-77 Credit Hours |  | Hours | Minimum Grade | Notes |
| IAP 334: Conceptual Development in the Arts |  | 3 | C |  |
| IAP 354: Visual Representation |  | 3 | C |  |
| IAP Upper Division Elective |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 78-92 Credit Hours |  | Hours | Minimum Grade | Notes |
| IAP 361: Digital Editing and Media Literacy (CS) |  | 3 | C |  |
| Complete 2 courses: <br> IAP Upper Division Elective |  | 6 | C |  |
| Elective |  | 3 |  |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR <br> Global Awareness (G) |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 93-107 Credit Hours |  | Hours | Minimum Grade | Notes |
| IAP 394: Performance |  | 3 | C |  |
| IAP Upper Division Elective |  | 3 | C |  |
| Upper Division Social and Behavioral Sciences (SB) OR Upper Division Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 108-122 Credit Hours |  | Hours | Minimum Grade | Notes |
| IAP 480: Senior Project |  | 3 | C |  |
| IAP Upper Division Elective |  | 3 | C |  |
| Elective |  | 3 |  |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |

## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)
- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 1 ？ARIZONA State UNIVERSITY

## 2011－2012 Major Map Life Sciences，BS

New College of Interdisciplinary Arts and Sciences
Campus：West WU⿴囗十⺝刂
ASLSCBS



| Integrative Systems Ecology Distribution Course List | Organismal Biology Distribution Course List | Cellular, Molecular and Physilogical Biology Distribution Course List |
| :---: | :---: | :---: |
| BIO 345: Organic Evolution | BIO 331: Animal Behavior | BCH 361: Principles of Biochemistry |
| BIO 474: Herpetology | BIO 370: Vertebrate Zoology | BCH 367: Elementary Biochemistry |
|  | BIO 385: Comparative Invertebrate Zoology | Laboratory |
| BIO 362: The Human Environment | MIC 443: The Microbial UniverseAND MIC | LSC 359: Animal Physiology Laboratory |
| PLB 300: Comparative Plant Diversity (L or | 444: The Microbial Universe Laboratory |  |
| SG) | PLB 310: The Flora of Arizona | LSC 432: Fundamentals of Pharmacology |
|  |  | BIO 443: Applied Molecular Genetics and Genomics |
|  |  | LSC 394: Plant Physiology |
|  |  | LSC 394: Animal Physiology Lecture |

## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year

## 2011-2012 Major Map Life Sciences (Environmental Science), BS

New College of Interdisciplinary Arts and Sciences
Campus:West WUE
ASLSCEBS

| Term 1 0-15 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Complete 2 courses: <br> BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) OR CHM 113: General Chemistry I (SQ) OR CHM 116: General Chemistry II (SQ) |  | 8 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ASU 101: The ASU Experience |  | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) OR <br> MAT 271: Calculus with Analytic Geometry II (MA) |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 2 16-32 Credit Hours |  | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) OR CHM 113: General Chemistry I (SQ) OR CHM 116: General Chemistry II (SQ) |  | 8 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) OR <br> MAT 271: Calculus with Analytic Geometry II (MA) |  | 3 | C |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |
|  | Term hours subtotal: | 17 |  |  |
| Term 3 33-47 Credit Hours |  | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| BIO 130: Introduction to Environmental Science (SQ) |  | 4 | C |  |
| CHM 233: General Organic Chemistry I AND <br> CHM 237: General Organic Chemistry Laboratory I OR <br> CHM 234: General Organic Chemistry II AND <br> CHM 238: General Organic Chemistry Laboratory II |  | 4 | C |  |
| LSC 347: Fundamentals of Genetics AND <br> LSC 348: Fundamentals of Genetics Laboratory |  | 4 | C |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |
| 4 Complete BIO 181, BIO 182 course(s). |  |  |  |  |
| 4 Complete CHM 113, CHM 116 course(s). |  |  |  |  |
| 1. Complete First-Year Composition requirement. |  |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 4 48-61 Credit Hours |  | Hours | Minimum Grade | Notes |
| BIO 320: Fundamentals of Ecology AND <br> BIO 353: Cell Biology OR <br> BIO 354: Fundamentals of Ecology AND <br> LSC 322: Fundamentals of Ecology Laboratory |  | 4 | C |  |
| CHM 233: General Organic Chemistry I AND <br> CHM 237: General Organic Chemistry Laboratory I OR <br> CHM 234: General Organic Chemistry II AND <br> CHM 238: General Organic Chemistry Laboratory II |  | 4 | C |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |



## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of " C " or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level ( 202 or equivalent), including American Sign Language IV;
3. completion of upper division course( $s$ ) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

2011-2012 Major Map Life Sciences (Forensics), BS<br>New College of Interdisciplinary Arts and Sciences<br>Campus:West WUE<br>ASLSCFBS

| Term 1 $10-15$ Credit Hours Critical course signified by |  | Hours | Minimum <br> Grade | Notes |
| :--- | :--- | :--- | :--- | :--- |


| Term 2 16-29 Credit Hours Critical course signified by ${ }^{\text {\% }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 BIO 182: General Biology II (SG) | 4 | C |  |
| 1. CHM 116: General Chemistry II (SQ) | 4 | C |  |
| COM 225: Public Speaking (L) OR COM 222: Argumentation (L) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 30-43 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |


| 1 CHM 233: General Organic Chemistry I | 3 | C |
| :--- | :---: | :---: |
| CHM 237: General Organic Chemistry Laboratory I | 1 | C |
| CRJ 100: Introduction to Criminal Justice (SB) | 3 | C |
| MAT 210: Brief Calculus (MA) | 4 | C |
| LSC 347: Fundamentals of Genetics AND | 4 | C |
| LSC 348: Fundamentals of Genetics Laboratory |  |  |

1 Complete First-Year Composition requirement.
Complete Mathematics (MA) requirement.
Term hours subtotal: 14

| Term 4 44-58 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| (1) CHM 234: General Organic Chemistry II | 3 | C |  |
| 1. CHM 238: General Organic Chemistry Laboratory II | 1 | C |  |
| BIO 305: Biology Behind the Crime Scene (SG) | 4 | C |  |
| BIO 353: Cell Biology AND <br> BIO 354: Cell Biology Laboratory | 4 | C |  |
| STP 226: Elements of Statistics (CS) | 3 | C |  |
|  | 15 |  |  |


| Term 5 | $59-73$ Credit Hours | Hours | Minimum <br> Grade |
| :--- | :--- | :---: | :---: |
| PHY 111: General Physics (SQ) | 3 | Cotes |  |
| PHY 113: General Physics Laboratory (SQ) | 1 | C |  |


| LSC 394: Modern Concepts in Biochemisrty | 3 | C |  |
| :---: | :---: | :---: | :---: |
| LSC 394: Modern Concepts in Biochemistry Laboratory | 1 | C |  |
| BIO 393: Careers in Natural and Health Sciences | 1 | Y |  |
| Historical Awareness (H) | 3 |  |  |
| Lower Division Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 74-89 Credit Hours | Hours | Minimum Grade | Notes |
| CHM 327: Instrumental Analysis | 3 | C |  |
| CHM 328: Instrumental Analysis Laboratory | 2 | C |  |
| PHY 112: General Physics (SQ) | 3 | C |  |
| PHY 114: General Physics Laboratory (SQ) | 1 | C |  |
| BIO 320: Fundamentals of Ecology AND <br> LSC 322: Fundamentals of Ecology Laboratory | 4 | C |  |
| PGS 468: Psychology and Law OR Upper Division Social and Behavioral Sciences (SB) | 3 | C |  |
| Term hours subtotal: | 16 |  |  |
| Term 7 90-105 Credit Hours | Hours | Minimum Grade | Notes |
| CHM 302: Environmental Chemistry | 3 | C |  |
| MIC 443: The Microbial Universe AND MIC 444: The Microbial Universe Laboratory | 4 | C |  |
| CRJ 410: Procedural Criminal Law | 3 | C |  |
| ENG 301: Writing for the Professions (L) OR ENG 311: Persuasive Writing (L) OR PHI 406: Moral Dilemmas (L or HU) | 3 | C |  |
| Upper Division Global Awareness (G) OR Upper Division Cultural Diversity in the U.S. (C) | 3 | C |  |
| Term hours subtotal: | 16 |  |  |
| Term 8 106-122 Credit Hours | Hours | Minimum Grade | Notes |
| LSC 430: Environmental and Human Toxicology | 4 | C |  |
| LSC 494: Comparative Forensics | 3 | C |  |
| LSC 499: Individualized Instruction | 3 | C |  |
| PLB 300: Comparative Plant Diversity (L or SG) | 4 | C |  |
| Upper Division Global Awareness (G) OR Upper Division Cultural Diversity in the U.S. (C) | 3 | C |  |
| Term hours subtotal: | 17 |  |  |

## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a " C ".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

Total Hours: 122
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

Total hrs at ASU: 30 minimum

- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year

## 4, ARIZONA State UNIVERSITY

## 2011-2012 Major Map <br> Political Science, BA

New College of Interdisciplinary Arts and Sciences
Campus:West WUE
ASPOLBA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| POS 110: Government and Politics (SB) OR POS 310: American National Government (SB) |  | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students <br> - Complete critical courses by the end of term 4 |
| ASU 101: The ASU Experience |  | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| MAT 142: College Mathematics (MA) |  | 3 | C |  |
| Related Area Course |  | 3 | C |  |
| Elective |  | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 2 17-32 Credit Hours |  | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Related Area Course |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) |  | 4 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| POS 150: Comparative Government (SB \& G) OR POS 160: Global Politics (SB \& G) |  | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) |  | 3 |  |  |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Natural Science - Quantitative (SQ) |  | 4 |  |  |
| Elective |  | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |  |
| 1 Complete First-Year Composition requirement. |  |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 4 49-63 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| 4 POS 210: Political Ideologies (SB) |  | 3 | C |  |
| Related Area Course |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Historical Awareness (H) |  | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 5 64-78 Credit Hours |  | Hours | Minimum Grade | Notes |


4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.
-

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## $1 \times$ Arizona State UNIVERSITY

## 2011－2012 Major Map <br> Political Science，BS

New College of Interdisciplinary Arts and Sciences
Campus：West WU⿴囗十⺝刂
ASPOLBS

| Term 1 0－16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| POS 110：Government and Politics（SB）OR POS 310：American National Government（SB） |  | 3 | C | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> －ASU 101 or College specific equivalent First Year Seminar required of all freshman students <br> －Complete critical courses by the end of term 4 |
| ASU 101：The ASU Experience |  | 1 |  |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students |  | 3 | C |  |
| MAT 142：College Mathematics（MA） |  | 3 | C |  |
| Related Area Course |  | 3 | C |  |
| Elective |  | 3 |  |  |
| Maintain 2．00 GPA in Critical Tracking Courses． |  |  |  |  |
|  | Term hours subtotal： | 16 |  |  |
| Term 2 17－32 Credit Hours |  | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students |  | 3 | C |  |
| Natural Science－General（SG）OR <br> Natural Science－Quantitative（SQ） |  | 4 |  |  |
| Humanities，Fine Arts and Design（HU） |  | 3 |  |  |
| Historical Awareness（H） |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal： | 16 |  |  |
| Term 3 33－48 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| POS 150：Comparative Government（SB \＆G）OR POS 160：Global Politics（SB \＆G） |  | 3 | C |  |
| Related Area Course |  | 3 | C |  |
| Natural Science－Quantitative（SQ） |  | 4 |  |  |
| Cultural Diversity in the U．S．（C） |  | 3 |  |  |
| Elective |  | 3 |  |  |
| Maintain 2．00 GPA in Critical Tracking Courses． |  |  |  |  |
| 4 Complete First－Year Composition requirement． |  |  |  |  |
| 4 Complete Mathematics（MA）requirement． |  |  |  |  |
|  | Term hours subtotal： | 16 |  |  |
| Term 4 49－63 Credit Hours Critical course signified by 9 |  | Hours | Minimum Grade | Notes |
| 1 POS 210：Political Ideologies（SB） |  | 3 | C |  |
| Literacy and Critical Inquiry（L） |  | 3 |  |  |
| Humanities，Fine Arts and Design（HU） |  | 3 |  |  |
| Upper Division Language \＆Cultures（see notes）AND Cultural Diversity in the U．S．（C）OR Global Awareness（G） |  | 3 | C |  |
| Elective |  | 3 |  |  |
| Maintain 2．00 GPA in Critical Tracking Courses． |  |  |  |  |
|  | Term hours subtotal： | 15 |  |  |


| Term 5 64-78 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| SBS 302: Qualitative Methods | 3 | C |  |
| SBS 304: Social Statistics I (CS) OR POS 401: Political Statistics (CS) | 3 | C |  |
| POS Upper Division Elective | 3 | C |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) | 3 | C |  |
| Upper Division Elective | 3 |  |  |
|  | Term hours subtotal: 15 |  |  |
| Term 6 79-93 Credit Hours | Hours | Minimum Grade | Notes |
| SBS 303: Quantitative Methods OR <br> POS 301: Empirical Political Inquiry (SB) | 3 | C |  |
| Complete 2 courses: <br> POS Upper Division Elective | 6 | C |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Elective | 3 |  |  |
|  | Term hours subtotal: 15 |  |  |
| Term 7 94-105 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> POS Upper Division Elective | 6 | C |  |
| Related Area Course | 3 | C |  |
| Upper Division Elective | 3 |  |  |
|  | Term hours subtotal: 12 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| POS Upper Division Elective | 3 | C |  |
| Complete 3 courses: Upper Division Elective | 9 |  |  |
| Elective | 3 |  |  |
|  | Term hours subtotal: 15 |  |  |
| Related Area Courses |  |  |  |
| ASB Elective |  |  |  |
| COM Elective |  |  |  |
| CRJ Elective |  |  |  |
| ECN Elective |  |  |  |
| GCU Elective |  |  |  |
| HST Elective |  |  |  |
| PGS Elective |  |  |  |
| POS Elective |  |  |  |
| SBS Elective |  |  |  |
| SOC Elective |  |  |  |
| WST Elective |  |  |  |
| Notes: |  |  |  |
| - Mathematics. Unless a specific math course is listed, stu pre-requisite. The mathematics requirement must be con <br> - No credit is granted toward fulfilling major or minor req <br> - Each student in the college is required to demonstrate pro below, any courses must be passed with a grade of "C" academic advisors regarding language requirements in thed Language and Cultures: This requirement may be satisfi | omplete MAT 142 or any MAT cou a grade of "C" or better. <br> any course unless the grade in that the analysis of language and culture dents considering graduate work aft areas of study. ne of the following: | which MAT is at least a passing an exa mpletion of a | MAT co <br> pleting th ould con |

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness ( G ) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

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Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Psychology, BA

New College of Interdisciplinary Arts and Sciences
Campus:Online, West WU日
ASPGSBA

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {1 }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 PGS 101: Introduction to Psychology (SB) | 3 | C | - ASU 101 is for ASU freshman students only. Not required of transfer students <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - Complete First-Year Composition by end of semester 3 |
| ASU 101: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| EDT 180: Computer Literacy (CS) OR CSE 180: Computer Literacy (CS) | 3 | C |  |
| Global Awareness (G) | 3 |  |  |
| Elective OR <br> MAT 117: College Algebra (MA) | 3 | C |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
|  | 16 |  |  |


| Term 2 17-32 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 1 MAT 119: Finite Mathematics (MA) |  | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Natural Science - Quantitative (SQ) |  | 4 | C |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| 1. PSY 230: Introduction to Statistics (CS) |  | 3 | C |  |
| Historical Awareness (H) |  | 3 |  |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) |  | 4 | C |  |
| Elective |  | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |  |
| 4. Complete Mathematics (MA) requirement. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 4 49-61 Credit Hours Critical course signified by ${ }^{\text {4 }}$ |  | Hours | Minimum Grade | Notes |
| 4 PSY 290: Research Methods (L or SG) |  | 4 | C | - See advisor for related field elective course options |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Complete 2 courses: Related Area Course |  | 6 | C |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |  |
|  | Term hours subtotal: | 13 |  |  |
| Term 5 62-76 Credit Hours |  | Hours | Minimum Grade | Notes |


| PGS 315: Personality Theory and Research (SB) OR PGS 341: Developmental Psychology (SB) OR PGS 350: Social Psychology (SB) |  | 3 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| PSY 320: Learning and Motivation OR PSY 323: Sensation and Perception OR PSY 324: Memory and Cognition OR PSY 325: Physiological Psychology |  | 3 | C |  |
| Upper Division Related Area Course |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 77-91 Credit Hours |  | Hours | Minimum Grade | Notes |
| PSY 320 OR PSY 323 OR PSY 324 OR PSY 325 OR PSY 330 OR PSY 369 OR PSY 470 |  | 3 | C |  |
| Upper Division Psychology Cluster Course |  | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
| Related Area Course |  | 3 | C |  |
| Term hours subtotal: |  | 15 |  |  |
| Term 7 92-106 Credit Hours |  | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> Upper Division Psychology Cluster Course |  | 6 | C |  |
| Language \& Cultures (see notes) AND <br> Upper Division Cultural Diversity in the U.S. (C) OR Upper Division Global Awareness (G) |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 107-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Psychology Cluster Course |  | 3 | C |  |
| Language \& Cultures (see notes) AND <br> Upper Division Cultural Diversity in the U.S. (C) OR Upper Division Global Awareness (G) |  | 3 | C |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
| Elective |  | 2 |  |  |
| Term hours subtotal: |  | 14 |  |  |
| Biological/Learning Cluster Course List | Clinical/Health Cluster Course List | Exper | Cluster Cou |  |
| PSY 320: Learning and Motivation | PGS 430: Industrial Psychology | PGS | rected Child |  |
| PSY 323: Sensation and Perception | PGS 453: Organizational Behavior (SB) | PGS | ecial Topics |  |
| PSY 324: Memory and Cognition | PGS 468: Psychology and Law | PGS | pervised Re |  |
| PSY 325: Physiological Psychology | PGS 482: Social Influence and Consumer Behavior (SB) | PGS | ternship |  |
| PSY 369: Biology of Human Sexuality |  | PGS | ecial Topics |  |
| PSY 425: Biological Bases of Behavior (L) |  | PSY | ecial Topics |  |
| PSY 470: Psychopharmacology |  | PSY | ecial Topics |  |
|  |  | PSY | dividualized |  |
| Industrial/Organizational Cluster Course List | Methodology and Critical Thinking Cluster Course List | Social | nce Cluster |  |
| PGS 430: Industrial Psychology | PGS 304: Effective Thinking (L) | PGS 250: Psychology and Society (SB) |  |  |
| PGS 453: Organizational Behavior (SB) | PSY 330: Statistical Methods (CS) | PGS | nvironmental |  |
| PGS 468: Psychology and Law |  | PGS 350: Social Psychology (SB) |  |  |
| PGS 482: Social Influence and Consumer Behavior (SB) |  | PGS 370: Interpersonal Relationships (SB) |  |  |

Life Span/Development Cluster Course List
PGS 341: Developmental Psychology (SB)
PGS 427: Psychology of Aging (SB)
PGS 446: Social Development (L or SB)

## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of "C" or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

- 
- Students can not satisfy the University General Studies Requirement of Natural Science-General (SG) with PSY 290.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## Hrs Resident Credit for

Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4 I ARIZONA State UNIVERSITY

## 2011-2012 Major Map Psychology, BS

New College of Interdisciplinary Arts and Sciences
Campus:West WUE
ASPGSBS



| PSY 425: Biological Bases of Behavior (L) |  | PSY 394: Special Topics |
| :---: | :---: | :---: |
| PSY 470: Psychopharmacology |  | PSY 494: Special Topics |
|  |  | PSY 499: Individualized Instruction |
| Industrial/Organizational Cluster Course List | Methodology and Critical Thinking Cluster Course List | Social Influence Cluster Course List |
| PGS 430: Industrial Psychology | PGS 304: Effective Thinking (L) | PGS 250: Psychology and Society (SB) |
| PGS 453: Organizational Behavior (SB) |  | PGS 306: Environmental Psychology (SB) |
| PGS 468: Psychology and Law | PSY 330: Statistical Methods (CS) | PGS 350: Social Psychology (SB) |
| PGS 482: Social Influence and Consumer Behavior (SB) |  | PGS 370: Interpersonal Relationships (SB) |
|  |  | PGS 385: Psychology of Gender |
|  |  | PGS 473: Psychology and Politics of Child Maltreatment |
|  |  | PGS 480: Cross-Cultural Social Psychology (SB \& G) |

Life Span/Development Cluster Course List
PGS 341: Developmental Psychology (SB)
PGS 427: Psychology of Aging (SB)
PGS 446: Social Development (L or SB)

## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

- 
- The BS in Psychology degree requires two lab science courses in addition to those used for the University General Studies requirement; one life science course from Biology, Microbiology, or Zoology; one physical science lab course from Astronomy, Chemistry, Geology, or Physics. Students can not satisfy the University General Studies Requirement of Natural Science-General (SG) with PSY 290.

Total Hours: 126
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Religion \& Applied Ethics Studies, BA

New College of Interdisciplinary Arts and Sciences
Campus:West WUE
ASRELBA


| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) | 3 | C |  |
| :---: | :---: | :---: | :---: |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours | Hours | Minimum Grade | Notes |
| REL 300: Research, Writing, and Thinking in Religion and Applied Ethics (L or HU) | 3 |  |  |
| REL OR PHI Elective | 3 |  |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) | 3 | C |  |
| Upper Division Applied Ethics Course | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours | Hours | Minimum Grade | Notes |
| REL 345: Asian Religious Traditions (HU \& G) | 3 |  |  |
| REL 484: Internship | 3 |  |  |
| REL OR PHI Elective | 3 |  |  |
| Upper Division Applied Ethics Course | 3 | C |  |
| Upper Division Religious Studies Course | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| REL 490: Senior Thesis | 3 |  |  |
| Complete 2 courses: <br> Upper Division Religious Studies Course | 6 | C |  |
| Upper Division Applied Ethics Course | 3 | C |  |
| Term hours subtotal: | 12 |  |  |


| Applied Ethics | Religious Studies |
| :---: | :---: |
| IAS 324: Existential Ethics (HU) | IAS 401: Sacred Scriptures and Social Choices (HU \& G) |
| PHI 324: Existential Ethics (HU) |  |
| IAS 340: Bioethics (HU) | REL 401: Sacred Scriptures and Social Choices (HU \& G) |
| PHI 340: Bioethics (HU) | IAS 430: Science and Religion (L or HU) |
| IAS 406: Moral Dilemmas (L or HU) | REL 430: Mesoamerican Shamanic Cosmographies |
| PHI 406: Moral Dilemmas (L or HU) | REL 321: Religion in America (HU \& C \& H) |
| IAS 407: Environmental Philosophy and |  |
| Policy (L or HU) | REL 381: Religion and Moral Issues (L or $\mathrm{HU})$ |
| PHI 407: Environmental Philosophy and Policy (L or HU) |  |
| IAS 408: Feminist Ethics (HU) | REL 420: Religion in American Life and Thought (HU) |
| PHI 408: Feminist Ethics (HU) |  |
| IAS 409: Eco-Community Ethics (HU) |  |
| PHI 409: Eco-Community Ethics (HU) |  |
| PHI 306: Applied Ethics (HU) |  |

## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with
academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness ( G ) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Social and Behavioral Sciences, BA

New College of Interdisciplinary Arts and Sciences
Campus:West WUE
ASSBSBA


Complete First-Year Composition requirement.
Complete Mathematics (MA) requirement.
Term hours subtotal:
16

| Term 4 49-66 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| PSY 230: Introduction to Statistics (CS) OR <br> SBS 304: Social Statistics I (CS) OR <br> SOC 390: Social Statistics I (CS) |  | 3 | C |  |
| Lower Division Related Electives |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Global Awareness (G) |  | 3 |  |  |
| Complete 2 courses: Thematic Coursework |  | 6 | C |  |
|  | Term hours subtotal: | 18 |  |  |


| Term 5 67-78 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| PSY 290: Research Methods (L or SG) OR <br> COM 308: Advanced Research Methods in Communication (L) OR <br> COM 309: Rhetorical, Interpretive, and Critical Methods in Communication OR <br> SBS 302: Qualitative Methods OR <br> SBS 303: Quantitative Methods OR <br> SOC 391: Research Methods (L or SB) |  | 3-4 | C |  |
| SBS 301: Cultural Diversity ((L or SB) \& C) |  | 3 | C |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 12-13 |  |  |
| Term 6 79-93 Credit Hours |  | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| Upper Division Thematic Coursework |  | 3 | C |  |
| Upper Division Related Electives |  | 3 | C |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) |  | 3 | C |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours |  | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| Complete 2 courses: <br> Upper Division Thematic Coursework |  | 6 | C |  |
| Upper Division Related Electives |  | 3 | C |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| SBS 484: Internship OR <br> SBS 498: Pro-Seminar |  | 3 | C |  |
| Upper Division Related Electives |  | 3 | C |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
| Term hours subtotal: |  | 12 |  |  |
| Theme: Individual and Culture | Theme: Individual and Behavior | Theme | vidual and Fa |  |
| ASB 211: Women in Other Cultures ((HU or SB) \& G) | PGS 304: Effective Thinking (L) | CDE 2 | uman Develo |  |
| ASB 311: Principles of Social Anthropology (SB \& G \& H) | PGS 466: Abnormal Psychology (SB) | COM 411: Communication in the Family (SB) |  |  |
|  | PSY 320: Learning and Motivation |  |  |  |
| COM 463: Intercultural Communication Theory and Research (SB \& G) | PSY 323: Sensation and Perception | COM 494: Mothers, Daughters, and Communication |  |  |
| FAS 370: Family Ethnic and Cultural Diversity (SB \& C) | PSY 324: Memory and Cognition | FAS 301: Introduction to Parenting |  |  |
|  | PSY 325: Physiological Psychology | FAS 331: Marriage and Family Relationships (SB) |  |  |
| PGS 306: Environmental Psychology (SB) | PSY 369: Biology of Human Sexuality | FAS 431: Parent-Adolescent Relationships (SB) |  |  |
| SBS 342: Mexico-U.S. Borderlands (SB \& C) | SOC 340: The Sociology of Deviance (SB) |  |  |  |
| SOC 328: Migration (SB \& G) |  | FAS 435: Advanced Marriage and Family Relationships (L or SB) |  |  |
| SOC 353: Death and Dying in Cross-Cultural Perspective ((HU or SB) \& G) |  | PGS 341: Developmental Psychology (SB) |  |  |
| WST 457: Women, Cultures, and Societies (SB \& G) |  | PGS 443: Abnormal Child Psychology (L or SB) |  |  |
|  |  | SOC 315: Courtship and Marriage (SB) |  |  |
|  |  | SOC 415: The Family (SB) |  |  |


| Theme: Individual and Society | Theme: Individual and Community |
| :---: | :---: |
| COM 421: Rhetoric of Social Issues (HU) | ASB 442: Urban Anthropology (SB) |
| PGS 350: Social Psychology (SB) | COM 310: Relational Communication |
| POS 210: Political Ideologies (SB) | COM 312: Communication, Conflict, and Negotiation |
| POS 437: Women, Power, and Politics (G) |  |
| SBS 447: Citizenship, Nationalism, and Identity (SB \& C) | COM 316: Gender and Communication (SB \& C) |
| SOC 241: Modern Social Problems (SB) | COM 319: Persuasion and Social Influence (SB) |
| SOC 352: Social Change (SB \& G \& H) | COM 353: Professional Communication |
| SOC 360: Sociological Psychology (SB) | PGS 370: Interpersonal Relationships (SB) |
| WST 100: Women, Gender, and Society (SB \& C) | PGS 461: Interpersonal Influence (SB) |
| WST 300: Women and Gender in Contemporary Society (SB \& C) | SOC 324: Work and the Workplace (SB \& H) |

Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

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Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011－2012 Major Map

## Social \＆Behavioral Sciences，BS

New College of Interdisciplinary Arts and Sciences
Campus：West WU⿴囗十⺝刂
ASSBSBS

| Term 1 0－16 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ASU 101：The ASU Experience |  | 1 |  | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> －ASU 101 or College specific equivalent First Year Seminar required of all freshman students <br> －Students who plan to take Psychology statistics should enroll in MAT 119 or MAT 170 or higher level math． |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students |  | 3 | C |  |
| MAT 142：College Mathematics（MA）OR <br> MAT 119：Finite Mathematics（MA）OR <br> MAT 170：Precalculus（MA） |  | 3 | C |  |
| Social and Behavioral Sciences（SB） |  | 3 |  |  |
| Humanities，Fine Arts and Design（HU） |  | 3 |  |  |
| Cultural Diversity in the U．S．（C） |  | 3 |  |  |
|  | Term hours subtotal： | 16 |  |  |
| Term 2 17－32 Credit Hours |  | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students |  | 3 | C | －Choose electives in consultation with an Academic Advisor in |
| Natural Science－Quantitative（SQ） |  | 4 |  | order to meet pre－requisites for |
| Historical Awareness（H） |  | 3 |  |  |
| Related Electives |  | 3 | C |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal： | 16 |  |  |
| Term 3 33－48 Credit Hours Critical course signified by ${ }^{(1)}$ |  | Hours | Minimum Grade | Notes |
| 1 SBS 200：Introduction to Social and Behavioral Sciences（SB） |  | 3 | C | －PSY 230 requires MAT 119 or higher level of math，MAT 142 is not considered a higher level of math |
| PSY 230：Introduction to Statistics（CS）OR <br> SBS 304：Social Statistics I（CS）OR <br> SOC 390：Social Statistics I（CS） |  | 3 | C |  |
| Lower Division Thematic Coursework |  | 3 | C |  |
| Literacy and Critical Inquiry（L） |  | 3 |  |  |
| Natural Science－General（SG）OR <br> Natural Science－Quantitative（SQ） |  | 4 |  |  |
| Maintain 2．00 GPA in Critical Tracking Courses． |  |  |  |  |
| 4 Complete First－Year Composition requirement． |  |  |  |  |
| 4 Complete Mathematics（MA）requirement． |  |  |  |  |
|  | Term hours subtotal： | 16 |  |  |
| Term 4 49－63 Credit Hours |  | Hours | Minimum Grade | Notes |


| PSY 290：Research Methods（L or SG）OR |  |  |
| :--- | :---: | :---: |
| COM 308：Advanced Research Methods in Communication（L）OR | $3-4$ | C |
| SBS 303：Quantitative Methods OR |  |  |
| SOC 391：Research Methods（L or SB） | 3 |  |
| Humanities，Fine Arts and Design（HU） | 3 |  |
| Global Awareness（G） |  | 3 |
| Related Electives |  | 3 |
| Upper Division Elective | Term hours subtotal： | $15-16$ |


| Term 5 64-78 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| SBS 301: Cultural Diversity ((L or SB) \& C) | 3 | C |  |
| COM 309: Rhetorical, Interpretive, and Critical Methods in Communication OR SBS 302: Qualitative Methods | 3 | C |  |
| Complete 2 courses: <br> Upper Division Thematic Coursework | 6 | C |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours | Hours | Minimum Grade | Notes |
| PSY 330: Statistical Methods (CS) OR SBS 304: Social Statistics I (CS) | 3 | C |  |
| Upper Division Thematic Coursework | 3 | C |  |
| Complete 2 courses: Upper Division Elective | 3 |  |  |
| Complete 2 courses: Elective | 6 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> Upper Division Thematic Coursework | 6 | C |  |
| Upper Division Elective | 3 |  |  |
| Complete 2 courses: Elective | 6 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| SBS 484: Internship OR SBS 498: Pro-Seminar | 3 | C |  |
| Upper Division Related Electives | 3 | C |  |
| Complete 2 courses: Upper Division Elective | 6 |  |  |
| Term hours subtotal: | 12 |  |  |


| Related Electives | Theme: Individual and Community | Theme: Individual and Culture |
| :---: | :---: | :---: |
| ASB Elective | ASB 442: Urban Anthropology (SB) | ASB 211: Women in Other Cultures ((HU or SB) \& G) |
| COM Elective | COM 310: Relational Communication |  |
| PGS Elective | COM 312: Communication, Conflict, and | ASB 311: Principles of Social Anthropology (SB \& G \& H) |
| POS Elective |  | COM 463: Intercultural Communication Theory and Research (SB \& G) |
| Prective | COM 316: Gender and Communication (SB |  |
|  |  | FAS 370: Family Ethnic and Cultural Diversity (SB \& C) |
| SBS Elective | COM 319: Persuasion and Social Influence |  |
| SOC Elective |  | PGS 306: Environmental Psychology (SB) |
|  | COM 353: Professional Communication | SBS 342: Mexico-U.S. Borderlands (SB \& C) |
|  | PGS 370: Interpersonal Relationships (SB) |  |
|  | PGS 461: Interpersonal Influence (SB) | SOC 328: Migration (SB \& G) |
|  | SOC 324: Work and the Workplace (SB \& H) | SOC 353: Death and Dying in Cross-Cultural Perspective ((HU or SB) \& G) |
|  |  | WST 457: Women, Cultures, and Societies (SB \& G) |
| Theme: Individual and Family | Theme: Individual and Behavior | Theme: Individual and Society |
| CDE 232: Human Development (SB) | PGS 304: Effective Thinking (L) | COM 421: Rhetoric of Social Issues (HU) |
| COM 411: Communication in the Family (SB) | PGS 466: Abnormal Psychology (SB) | PGS 350: Social Psychology (SB) |
|  | PSY 320: Learning and Motivation | POS 210: Political Ideologies (SB) |
| Academic Catalog Archive 2011-2012 1455 |  |  |


| COM 494: Mothers, Daughters, and Communication | PSY 323: Sensation and Perception | POS 437: Women, Power, and Politics (G) |
| :---: | :---: | :---: |
|  | PSY 324: Memory and Cognition | SBS 447: Citizenship, Nationalism, and Identity (SB \& C) |
| 301: Introduction to Parenting |  |  |
| FAS 331: Marriage and Family Relationships (SB) | PSY 325: Physiological Psychology | SOC 241: Modern Social Problems (SB) |
|  | PSY 369: Biology of Human Sexuality |  |
| FAS 431: Parent-Adolescent Relationships (SB) | SOC 340: The Sociology of Deviance (SB) | SOC 352: Social Change (SB \& G \& H) |
|  |  | SOC 360: Sociological Psychology (SB) |
| FAS 435: Advanced Marriage and Family Relationships (L or SB) |  | WST 100: Women, Gender, and Society (SB \& C) |
| PGS 341: Developmental Psychology (SB) |  | WST 300: Women and Gender in Contemporary Society (SB \& C) |
| PGS 443: Abnormal Child Psychology (L or SB) |  |  |
|  |  | WST 380: Race, Gender and Class (SB \& C) |
| SOC 315: Courtship and Marriage (SB) |  |  |
| SOC 415: The Family (SB) |  |  |

## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

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Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4) ARIZONA State UNIVERSITY

## 2011-2012 Major Map Sociology, BA

New College of Interdisciplinary Arts and Sciences
Campus:West WUE
ASSOCBA

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 1 SOC 101: Introductory Sociology (SB) |  | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ASU 101: The ASU Experience |  | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) |  | 4 |  |  |
| MAT 142: College Mathematics (MA) |  | 3 | C |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 2 15-30 Credit Hours |  | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Natural Science - Quantitative (SQ) |  | 4 |  |  |
| Elective |  | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |  |
| Related Area Course |  | 3 | C |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Elective |  | 3 |  |  |
| Related Area Course |  | 3 | C |  |
| Historical Awareness (H) |  | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 4 46-60 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| SBS 304: Social Statistics I (CS) OR SOC 390: Social Statistics I (CS) |  | 3 | C |  |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Global Awareness (G) |  | 3 |  |  |
| Elective |  | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |  |
| Related Area Course |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 5 61-75 Credit Hours |  | Hours | Minimum Grade | Notes |
| SBS 302: Qualitative Methods OR <br> SBS 303: Quantitative Methods OR <br> SOC 391: Research Methods (L or SB) |  | 3 | C |  |


Related Area Courses
ASB Elective
GCU Elective
PGS Elective
POS Elective
PSY Elective
SBS Elective
SOC Elective
WST Elective
Social and Behavioral Sciences (SB)

## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to
meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 1 ) ARIZONA STATE UNIVERSITY

## 2011-2012 Major Map <br> Sociology, BS

New College of Interdisciplinary Arts and Sciences
Campus:West WUE
ASSOCBS

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade |
| :---: | :---: | :---: |
| 9 SOC 101: Introductory Sociology (SB) | 3 | C |
| ASU 101: The ASU Experience | 1 |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |
| MAT 142: College Mathematics (MA) | 3 | C |
| $\begin{aligned} & \text { Natural Science - General (SG) OR } \\ & \text { Natural Science - Quantitative (SQ) } \end{aligned}$ | 4 |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |

Term hours subtotal: 14

| Term 2 15-30 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Related Area Course | 3 | C |  |
| Elective | 3 |  |  |
| Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Related Area Course | 3 | C |  |
| Historical Awareness (H) | 3 |  |  |
| Elective | 3 |  |  |
| 4. Complete First-Year Composition requirement. |  |  |  |
| Complete Mathematics (MA) requirement. |  |  |  |


| Term 4 $46-60$ Credit Hours Critical course signified by | Hours | Minimum <br> Grade |
| :--- | :--- | :---: |
| SBS 304: Social Statistics I (CS) OR | 3 | C |
| SOC 390: Social Statistics I (CS) | 3 | C |
| Related Area Course | 3 |  |
| Cultural Diversity in the U.S. (C) | 3 |  |
| Global Awareness (G) | 3 |  |
| Elective | Term hours subtotal: | 15 |
| Maintain 2.00 GPA in Critical Tracking Courses. | 3 |  |
|  |  |  |



1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness ( G ) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

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Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year

## 1 ) ARIZONA STATE UNIVERSITY

## 2011-2012 Major Map <br> Spanish, BA

New College of Interdisciplinary Arts and Sciences
Campus:West WUE
ASSPABA


| Term 2 15-30 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: |
| SPA 201: Intermediate Spanish (G) OR SPA 203: Intermediate Spanish for Bilinguals (G) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Historical Awareness (H) | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-44 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| SPA 202: Intermediate Spanish (G) OR SPA 204: Intermediate Spanish for Bilinguals (G) | 4 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4. Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 45-61 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| SPA 313: Spanish Conversation and Composition (G) OR SPA 315: Spanish Conversation and Composition for Bilinguals OR Elective AND Global Awareness (G) | 4 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 5 62-76 Credit Hours | Hours | Minimum Grade | Notes |
| SPA 314: Spanish Conversation and Composition (G) OR SPA 316: Spanish Conversation and Composition for Bilinguals OR Elective | 3 | C |  |


Related Area Courses
AMS 327: Regional Cultures
AMS 417: Religious Traditions of the
American Southwest
AMS 422: Studies in American Literature
AMS 428: Chicano Cultures in the Southwest
(SB)

AMS 429: Interdisciplinary Topics
ENG 334: The American Southwest in
Literature and Film. ((L or HU) \& C)
ENG 363: Transborder Mexican and
Chicano/a Literature of Southwest North
America ((L or HU) \& C)
ENG 460: Ethnic Women Writers
ETH 100: Introduction to Ethnic Studies (SB \& C)

ETH 310: Research Methods in Ethnic,
Racial, and First Nations Populations (SB)

HST 341: U.S. West 19th Century (SB \& H)
HST 375: Colonial Latin America (SB \& H)
HST 418: The Hispanic Southwest (SB)
HST 419: 20th Century Chicano/a History
HST 437: Spain through the Golden Age ((HU or SB) \& H)

HST 447: Modern Mexico (SB \& H)
WST 430: Gender on the Borderlands (SB \& G)

WST 467: Ethnic Women Writers (HU \& C)
WST 473: Latina/Chicana Representation (SB \& C)

WST 475: Women of the Diaspora across Cultures (HU)

## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of "C" or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## Hrs Resident Credit for

Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## $1 \times$ Arizona State UNIVERSITY

## 2011-2012 Major Map Statistics, BS

New College of Interdisciplinary Arts and Sciences
Campus:West WUE
ASSTABS

| Term 1 0-14 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| $1 . \mathrm{ACO}$ 101: Introduction to Computer Science (CS) |  | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ASU 101: The ASU Experience |  | 1 |  |  |
| MAT 270: Calculus with Analytic Geometry I (MA) |  | 4 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Global Awareness (G) |  | 3 |  |  |
|  | Term hours subtotal: | 14 |  |  |



Term hours subtotal:
17


Page 1

| Term 6 77-91 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ACO 102: Principles of Computer Science (CS) OR Upper Division Cultural Diversity in the U.S. (C) OR Upper Division Global Awareness (G) |  | 3 |  |  |
| STP 394: Applied Regression Analysis and TIme Series |  | 3 | C |  |
| STP 427: Mathematical Statistics |  | 3 | C |  |
| Track Focus Area Course |  | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 92-106 Credit Hours |  | Hours | Minimum Grade | Notes |
| ACO 102: Principles of Computer Science (CS) OR Upper Division Cultural Diversity in the U.S. (C) OR Upper Division Global Awareness (G) |  | 3 |  |  |
| STP 494: Senior Capstone |  | 3 | C |  |
| STP 494: Quality Improvement OR <br> STP 425: Stochastic Processes OR <br> STP 494: Categorical Data Analysis OR <br> STP 494: Nonparametric Statistics OR <br> STP 494: Multivariate Analysis |  | 3 | C |  |
| Track Focus Area Course |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 107-121 Credit Hours |  | Hours | Minimum Grade | Notes |
| STP 494: Quality Improvement OR <br> STP 425: Stochastic Processes OR <br> STP 494: Categorical Data Analysis OR <br> STP 494: Nonparametric Statistics OR <br> STP 494: Multivariate Analysis |  | 3 | C |  |
| Track Focus Area Course |  | 3 | C |  |
| Complete 3 courses: Upper Division Elective |  | 9 |  |  |
|  | Term hours subtotal: | 15 |  |  |

Area of Focus Course
CHM 113: General Chemistry I (SQ)
CHM 116: General Chemistry II (SQ)
CHM 233: General Organic Chemistry I
MAT 243: Discrete Mathematical Structures
MAT 371: Advanced Calculus I
MAT 421: Applied Computational Methods
(CS)
MAT 450: Mathematical Models in Biology
ACO 102: Principles of Computer Science
(CS)
ACO 201: Data Structures and Algorithms
(CS)
ACO 220: Introduction to Database Systems
(CS)
Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a
pre-requisite. The mathematics requirement must be completed with a grade of "C" or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement
below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with
academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

Total Hours: 121
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Women and Gender Studies, BA

New College of Interdisciplinary Arts and Sciences
Campus:West WUE
ASWSTBA

## This program is not currently accepting applications.

| Term 1 0-16 Credit Hours |  | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ASU 101: The ASU Experience |  | 1 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| MAT 142: College Mathematics (MA) |  | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) |  | 3 |  |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 2 17-32 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| 1 WST 100: Women, Gender, and Society (SB \& C) |  | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Natural Science - Quantitative (SQ) |  | 4 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 3 33-47 Credit Hours Critical course signified by ${ }^{\text {a }}$ |  | Hours | Minimum Grade | Notes |
| Global Awareness (G) |  | 3 | C |  |
| Historical Awareness (H) |  | 3 |  |  |
| Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Social and Behavioral Sciences (SB) |  | 3 | C |  |
| Elective |  | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |  |
| Complete Mathematics (MA) requirement. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {P }}$ |  | Hours | Minimum Grade | Notes |
| WST/Related Course Elective |  | 3 | C |  |
| \% WST 380: Race, Gender and Class (SB \& C) |  | 3 | C |  |
| Natural Science - General (SG) OR Natural Science - Quantitative (SQ) |  | 4 |  |  |
| Elective |  | 6 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 5 64-78 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Feminist Theory and/or Methods |  | 3 | C |  |
| Upper Division Global/Transnational Perspectives |  | 3 | C |  |


| Upper Division WST/Related Course Elective |  | 3 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| Complete 2 courses: Upper Division Elective | 6 |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours |  | Hours | Minimum <br> Grade | Notes |
| Upper Division WST/Related Course Elective |  | 9 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours |  | Hours | Minimum <br> Grade | Notes |
| Upper Division WST/Related Course Elective |  | 9 | C |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) |  | 3 | C |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| WST 498: Theory and Method in Women AND Upper Division Literacy and Critical Inquiry (L) |  | 3 | C |  |
| Upper Division WST/Related Course Elective |  | 6 | C |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) |  | 3 | C |  |
|  | Term hours subtotal: | 12 |  |  |

- Students must complete 3 credit hours in each of two areas: Global/Transnational Perspectives, \& Feminist Theory and/or Methods.

| Related Area Courses | Global/Transnational Perspectives | Feminist Theory and/or Methods |
| :---: | :---: | :---: |
| AMS 332: Blues Music in American Culture, SRE:Native American Religious, Studies in Race and Ethnicity | WST 430: Gender on the Borderlands (SB \& G) | WST 333: Critical Perspectives on Sexuality (SB \& C) |
| AMS 428: Chicano Cultures in the Southwest (SB) | WST 457: Women, Cultures, and Societies (SB \& G) | WST 370: Chronicling Women's Lives (HU \& C) |
| AMS 431: Gender and Sexuality in Sports | WST 483: Women Writers Across Cultures ( $\mathrm{HU} \& \mathrm{G}$ ) | WST 376: Feminist Theory (H \& C) |
| COM 316: Gender and Communication (SB \& C) |  |  |
| COM 416: Gender, Race, Colonialism, and Media |  |  |
| ENG 363: Transborder Mexican and Chicano/a Literature of Southwest North America ((L or HU) \& C) |  |  |
| ENG 454: Gender and Literature (L or HU) |  |  |
| ENG 455: Contemporary Women Writers |  |  |
| ENG 460: Ethnic Women Writers |  |  |
| ENG 461: Contemporary Arab Women Writers, Global Feminism, Native American Literature, Native American Women, Native American Women, Studies in Women and Literature, Virginia Woolf |  |  |
| ENG 462: Africana Literature (HU \& G) |  |  |
| HST 312: History of Women in Science and Medicine (HU or SB) |  |  |
| HST 330: Mexican Women in the U.S. ((L or SB) \& H \& C) |  |  |

HST 363: Sex and Society in Early Modern
Europe ((HU or SB) \& H)
HST 377: Women in Colonial Latin America
(H)
HST 415: Unequal Sisters/Women-Pol/Cult
(L or SB) \& H \& C)
HST 464: Women in Europe to 1750 (H)
HST 465: Women in Europe, 1750 to Present
((L or HU or SB) \& H)
HST 494: Women \& Gender Transaltantic
Habsburg Empire
IAP 310: Women in Art
IAS 408: Feminist Ethics (HU)
PHI 408: Feminist Ethics (HU)
LSC 363: Genes, Race, Gender, and Society
(L)
POS 430: Race and Politics in the Americas
(SB)
POS 437: Women, Power, and Politics (G)
REL 390: Women and Religion (HU \& G)
WST 390: Women and Religions (HU \& G)
SBS 301: Cultural Diversity ((L or SB) \& C)
SBS 494: Gender and Violence
SOC 426: Social Inequality (SB)
Pa

SOC 457: Global Social Movements (SB \& G)

## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a "C".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of " C " or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

- The Women and Gender Studies major (B.A.) consists of 45 credit hours, of which 30 credit hours must be upper division (300-400 level). Students must complete 9 credit hours of the required core courses, as well as 3 credit hours in each of two areas: Global/Transnational Perspectives, \& Feminist Theory and/or Methods. Additionally, students must complete 30 credit hours of Women and Gender Studies or other approved elective course work (see list below). Students must complete all course work in the major with a grade of ÂCÂ (2.00) or better. No pass/fail credit may be used for major requirements.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011－2012 Major Map Women and Gender Studies，BS

New College of Interdisciplinary Arts and Sciences
Campus：West WU⿴囗十⺝刂
ASWSTBS

| Term 1 0－16 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ASU 101：The ASU Experience |  | 1 |  | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> －ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students |  | 3 | C |  |
| MAT 142：College Mathematics（MA） |  | 3 | C |  |
| Computer／Statistics／Quantitative Applications（CS） |  | 3 |  |  |
| Humanities，Fine Arts and Design（HU） |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal： | 16 |  |  |
| Term 2 17－32 Credit Hours Critical course signified by ${ }^{(1)}$ |  | Hours | Minimum Grade | Notes |
| 4 WST 100：Women，Gender，and Society（SB \＆C） |  | 3 | C |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students |  | 3 | C |  |
| Humanities，Fine Arts and Design（HU） |  | 3 |  |  |
| Natural Science－Quantitative（SQ） |  | 4 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal： | 16 |  |  |
| Term 3 33－47 Credit Hours Critical course signified by ${ }^{\text {d }}$ |  | Hours | Minimum Grade | Notes |
| Literacy and Critical Inquiry（L） |  | 3 |  |  |
| Global Awareness（G） |  | 3 |  |  |
| Historical Awareness（H） |  | 3 |  |  |
| Elective |  | 6 |  |  |
| 4 Complete First－Year Composition requirement． |  |  |  |  |
| 4 Complete Mathematics（MA）requirement． |  |  |  |  |
|  | Term hours subtotal： | 15 |  |  |
| Term 4 48－63 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| 4 WST 380：Race，Gender and Class（SB \＆C） |  | 3 |  |  |
| WST／Related Course Elective |  | 3 | C |  |
| $\begin{aligned} & \text { Natural Science - General (SG) OR } \\ & \text { Natural Science - Quantitative (SQ) } \end{aligned}$ |  | 4 |  |  |
| Elective |  | 6 |  |  |
|  | Term hours subtotal： | 16 |  |  |
| Term 5 64－78 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division Feminist Theory and／or Methods |  | 3 | C |  |
| Upper Division Global／Transnational Perspectives AND Upper Division Humanities，Fine Arts and Design（HU） |  | 3 | C |  |
| WST／Related Course Elective |  | 3 | C |  |
| Complete 2 courses： Upper Division Elective |  | 6 |  |  |


| Term 6 79-93 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Upper Division WST/Related Course Elective |  | 9 | C |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) |  | 3 | C |  |
| BS majors: statistics, quantitative methods, or computer science |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| Upper Division WST/Related Course Elective |  | 9 | C |  |
| Upper Division Language \& Cultures (see notes) AND Cultural Diversity in the U.S. (C) OR Global Awareness (G) |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| WST 498: Theory and Method in Women AND Upper Division Literacy and Critical Inquiry (L) |  | 3 | C |  |
| BS majors: statistics, quantitative methods, or computer science |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division WST/Related Course Elective |  | 6 | C |  |
|  | Term hours subtotal: | 12 |  |  |

- Students must complete 3 credit hours in each of two areas: Global/Transnational Perspectives, \& Feminist Theory and/or Methods.

| Related Area Courses | Feminist Theory and/or Methods | Global/Transnational Perspectives |
| :---: | :---: | :---: |
| AMS 332: Blues Music in American Culture, SRE:Native American Religious, Studies in Race and Ethnicity | WST 333: Critical Perspectives on Sexuality (SB \& C) | WST 430: Gender on the Borderlands (SB \& G) |
| AMS 428: Chicano Cultures in the Southwest (SB) | WST 370: Chronicling Women's Lives (HU \& C) | WST 457: Women, Cultures, and Societies (SB \& G) |
| AMS 431: Gender and Sexuality in Sports | WST 376: Feminist Theory (H \& C) | WST 483: Women Writers Across Cultures (HU \& G) |
| COM 316: Gender and Communication (SB \& C) |  |  |
| COM 416: Gender, Race, Colonialism, and Media |  |  |
| ENG 363: Transborder Mexican and Chicano/a Literature of Southwest North America ((L or HU) \& C) |  |  |
| ENG 454: Gender and Literature (L or HU) |  |  |
| ENG 455: Contemporary Women Writers |  |  |
| ENG 460: Ethnic Women Writers |  |  |
| ENG 461: Contemporary Arab Women Writers, Global Feminism, Native American Literature, Native American Women, Native American Women, Studies in Women and Literature, Virginia Woolf |  |  |
| ENG 462: Africana Literature (HU \& G) |  |  |
| HST 312: History of Women in Science and Medicine (HU or SB) |  |  |
| HST 330: Mexican Women in the U.S. ((L or SB) \& H \& C) |  |  |
| HST 363: Sex and Society in Early Modern Europe ((HU or SB) \& H) |  |  |

HST 377: Women in Colonial Latin America
(H)
HST 415: Unequal Sisters/Women-Pol/Cult
(L or SB) \& H \& C)
HST 464: Women in Europe to 1750 (H)
HST 465: Women in Europe, 1750 to Present
((L or HU or SB) \& H)
HST 494: Women \& Gender Transaltantic
Habsburg Empire
IAP 310: Women in Art
IAS 408: Feminist Ethics (HU)
PHI 408: Feminist Ethics (HU)
LSC 363: Genes, Race, Gender, and Society
(L)
POS 430: Race and Politics in the Americas
(SB)
POS 437: Women, Power, and Politics (G)
REL 390: Women and Religion (HU \& G)
WST 390: Women and Religions (HU \& G)
SBS 301: Cultural Diversity ((L or SB) \& C)
SBS 494: Gender and Violence
SOC 426: Social Inequality (SB)
SOC 457: Global Social Movements (SB \&
G)
Related Course work
Pa

## Notes:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of " C " or better.
- No credit is granted toward fulfilling major or minor requirements in any course unless the grade in that course is at least a " C ".
- Each student in the college is required to demonstrate proficiency in the analysis of language and cultures by passing an examination or by completing the requirement below, any courses must be passed with a grade of "C" or higher. Students considering graduate work after completion of a bachelor's degree should consult with academic advisors regarding language requirements in their intended areas of study.
Language and Cultures: This requirement may be satisfied through one of the following:

1. completion of secondary education at a school in which the language of instruction is not English;
2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV;
3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the university requirement;
5. completion of two sequential semesters of coursework in a current computer language.

- The Women and Gender Studies major (B.S.) consists of 51 credit hours, of which 30 credit hours must be upper division (300-400 level). Students must complete 9 credit hours of the required core courses, as well as 3 credit hours in each of two areas: Global/Transnational Perspectives, \& Feminist Theory and/or Methods. Additionally, students must complete 30 credit hours of Women and Gender Studies or other approved elective course work (see list below). Finally, students must complete six hours of statistics, computer science, or quantitative research methods. This sequence must be approved by the division advisor. Students must complete all course work in the major with a grade of $\hat{A} C \hat{A}(2.00)$ or better. No pass/fail credit may be used for major requirements.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> Nursing, BSN

College of Nursing \& Health Innovation
Campus:Downtown Phoenix, Online
NUNURDBSN

| Term 1 0-14 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CDE 232: Human Development (SB) OR <br> HCR 210: Clinical Health Care Ethics (HU) OR <br> HCR 220: Introduction to Nursing and Healthcare Systems (H) OR <br> HCR 230: Culture and Health (C \& G) OR <br> NTR 241: Human Nutrition OR <br> PGS 101: Introduction to Psychology (SB) OR <br> Humanities, Fine Arts and Design (HU) OR <br> Social and Behavioral Sciences (SB) OR <br> Computer/Statistics/Quantitative Applications (CS) OR <br> Elective | 3 | B | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students <br> - Although a minimum grade of B is required in all classes, one grade of C in a critical required course will be allowed |
| CHM 101: Introductory Chemistry (SQ) OR <br> BIO 201: Human Anatomy and Physiology I (SG) OR <br> BIO 202: Human Anatomy and Physiology II (SG) OR <br> MIC 205: Microbiology (SG) AND <br> MIC 206: Microbiology Laboratory (SG) | 4 | B |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | B |  |
| 1 MAT 142: College Mathematics (MA) | 3 | B |  |
| ASU 101: The ASU Experience | 1 |  |  |
| 1. Maintain 3.50 GPA in Critical Tracking Courses. |  |  |  |
| 4. Minimum 3.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-30 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| Complete 3 courses: <br> CDE 232: Human Development (SB) OR <br> HCR 210: Clinical Health Care Ethics (HU) OR <br> HCR 220: Introduction to Nursing and Healthcare Systems (H) OR <br> HCR 230: Culture and Health (C \& G) OR <br> NTR 241: Human Nutrition OR <br> PGS 101: Introduction to Psychology (SB) OR <br> Humanities, Fine Arts and Design (HU) OR <br> Social and Behavioral Sciences (SB) OR <br> Computer/Statistics/Quantitative Applications (CS) OR <br> Elective | 9 | B |  |
| CHM 101: Introductory Chemistry (SQ) OR <br> BIO 201: Human Anatomy and Physiology I (SG) OR <br> BIO 202: Human Anatomy and Physiology II (SG) OR <br> MIC 205: Microbiology (SG) AND <br> MIC 206: Microbiology Laboratory (SG) | 4 | B |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | B |  |
| 4. Maintain 3.50 GPA in Critical Tracking Courses. |  |  |  |
| 1. Minimum 3.50 GPA ASU Cumulative. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-44 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |

Complete 2 courses:
CDE 232: Human Development (SB) OR
HCR 210: Clinical Health Care Ethics (HU) OR
HCR 220: Introduction to Nursing and Healthcare Systems (H) OR
HCR 230: Culture and Health (C \& G) OR
(1. NTR 241: Human Nutrition OR

PGS 101: Introduction to Psychology (SB) OR


| NUR 394: Informatics OR |  |  |
| :---: | :---: | :---: |
| NUR 394: Health and the Media OR | 1 | C |
| NUR 394: Alternative Healing Practices OR |  |  |
| NUR 394: Emergency Nursing |  |  |
| NUR 413: Nursing for Complex Care | 4 | C |
| NUR 423: Nursing Practice: Complex Care and Leadership and Management | 5 | C |
| NUR 430: Professional Nurse Attributes: Leadership and Management | 3 | C |
| NUR 431: Professional Nurse Attributes Innovative Professional (L) | 3 | C |

## Notes:

- To maintain your Continuing Eligibility status full time enrollment of 12 or more credit hours is required each term.

Total Hours: 121
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


# Arizona State University <br> College of Nursing and Health Innovation <br> Bachelor of Applied Science Degree <br> Food Service Management Concentration 

The B.A.S. degree with a concentration in food service management is designed to complement and enhance the educational preparation of students holding an A.A.S. degree. The concentration is particularly designed for students holding an A.A.S. degree in culinary or hospitality science. The degree prepares students for careers in food production, service, management, and marketing. With additional education and/or professional training, students may also become credentialed as certified dietary managers, school food service and nutrition specialists, or registered sanitarians.

Admission to the B.A.S. degree program is restricted to students holding an A.A.S. degree from a regionally accredited U.S. postsecondary educational institution. A GPA of 2.00 or higher is required for all resident applicants and a 2.50 is required for nonresident applicants. The B.A.S. degree consists of 60 semester hours of upper-division ( 300 level and above) courses. A total of 120 semester hours is required for graduation.

## General Studies (19 credits)

| Credits |  | Recommended courses |
| :---: | :---: | :---: |
| Mathematical Studies (MA or CS) | 3 | ASC 315 |
| Natural Sciences (SG) | 4 | Life science course |
| Literacy and Critical Inquiry (L) | 3 | ENG 301 or TWC 301 |
| Humanities, Fine Arts, and Design (HU) | 3 | Upper-division HU course |
| Social and Behavioral Sciences (SB) | 3 | Upper-division SB course |
| General Studies (HU or SB) | 3 | Upper-division HU or SB course |

## B.A.S. Area Core ( 15 credits)

| MGT 300 Organization and Management Leadership or BUA 380 Small Business Leadership | 3 |
| :--- | :---: |
| MKT 300 Marketing and Business Performance or BUA 382 Small Business Sales and Market <br> Development | 3 |
| NTR 300 Computer Applications in Nutrition (CS) | 3 |
| NTR 344 Nutrition Services Management (L) | 3 |
| NTR 351 Nutrition and Health Communications (L) | 3 |

Food Service Concentration (21 credits)

| NTR 343 Food Service Purchasing | 3 |
| :--- | :---: |
| NTR 345 Development of Healthy Cuisines | 3 |
| NTR 348 Cultural Aspects of Food (SB \& C \& G) | 3 |
| NTR 401 Professional Practice in Food Service Management | 3 |
| NTR 445 Management of Food Service Systems | 3 |
| NTR course nutrition elective (upper division) | 3 |
| NTR/AGB course nutrition/agribusiness elective (upper division) | 3 |

## Assignable Credits (5 credits)

| B.A.S. Degree Summary |  |
| :--- | :---: |
| ( ) credit credi |  |
| A.A.S. Degree Block Transfer | 60 |
| General Studies | 19 |
| B.A.S. Area Core | 15 |
| Food Service Concentration | 21 |
| Assignable Credits | 5 |
| Total Credits |  |

## College of Nursing and Healthcare Innovation Bachelor of Applied Science Degree: Health Sciences (HSC)

## Curriculum Check Sheet

Note: ASU does not regard the AAS-to-BAS as a traditional transfer degree, so special provisions apply:
[a] The AAS degree holder (the student) will be admitted only to the BAS program specified, e.g. Health Sciences. Only those students with a regionally accredited AAS from an approved (articulated) Health/Health Technology program are eligible for this degree.
[b] The institution from which the student received his/her AAS degree must be regionally accredited. A foreign institution must be approved and recognized as a postsecondary institution by the Ministry of Education or other governmental authorities.
[c] All courses applied toward completion of the AAS must have been completed with a grade of $C$ or higher. ASU will not accept courses with a grade of $D$.
[d] A block of up to 60 credit hours will be accepted for transfer with the completed AAS from an approved (articulated) Health/Health Technology program. Students must confirm with the institution granting the AAS that it has an articulation agreement with ASU in place for the BAS in Health Science.
[e] A minimum of 60 credit hours for the BAS degree must be completed at ASU. If the AAS degree is earned with fewer than 60 credit hours, the student must complete additional credit hours at ASU, so that the total credit hours of the AAS and BAS degrees are at least 120.
[e] After admission to ASU, if a student wishes to transfer out of the BAS program into another program at ASU, the agreement to accept a block of up to 60 transfer credit hours from the AAS degree shall be void and no longer in effect. The student's transcript will be evaluated course-by-course and only transferrable courses will be accepted.

## B.A.S. Degree Summary

| A.A.S. Degree Block Transfer | 60 |
| :--- | :--- |
| ASU General Studies | $22-25$ |
| B.A.S. Health Sciences Area Core | 9 |
| Health Sciences Concentration | $26-29$ |
| TOTAL | 120 |

## I. Articulated General Studies Sequence (typically within the AAS degree) (16-19 credits):

The articulated AAS degree must contain the following lower division general studies and foundations coursework:

First Year Composition (6 hrs)
Humanities (selected from AGEC list) (3 hrs)
Social \& Behavioral Sciences (selected from AGEC list) (3 hrs)
Natural Sciences (Selected from AGEC list) (4 hrs)
Mathematics ( $0-3 \mathrm{hrs}$ ). If not completed in the AAS, this requirement will be included as part of the 60-units completed as ASU in order to meet ASU GS requirement.

All courses used for General Studies within the AAS must satisfy AGEC (Arizona General Education Curriculum) criteria (or an equivalent articulated general studies transfer pattern) with the exception of mathematics.

## II. ASU General Studies Sequence (22-25 credits):

Within General Studies or other courses, student must meet Global Awareness, Historical Awareness, Cultural Diversity, and Literacy course requirements of ASU.

| Credits |  | Recommended courses |
| :--- | :--- | :--- |
| Mathematical Studies <br> (MA) 3 Must meet AGEC MA criteria. <br> Mathematical Studies: <br> (CS) 3 APM 301 Introductory Statistics OR equivalent upper division <br> statistics course [ABS 350 Applied Statistics, ASC 315 Numeracy in <br> Technology, SOC 390 Social Statistics, SWU 321 Statistics for <br> Social Workers, STP 420 Introduction to Applied Statistics] <br> Literacy (L) \& Critical <br> Inquiry <br> (at least 3 hrs upper <br> division) 6 TWC 301 General Principles of Multimedia Writing OR equivalent <br> upper division (L) course [ENG 301 Writing for the Professions, ENG <br> 302 Business Writing] <br> Natural Science [SQ] 4  <br> Humanities (HU) 3 HSC 320 Applied Medical/Health Care Ethics OR equivalent upper <br> division (HU) course [PHI 306 Applied Ethics, PHI 406 Moral <br> Dilemmas, REL 381 Religion and Moral Issues] <br> Social Science (SB) 3 NTR 350 Nutrition Counseling OR equivalent upper division (SB) <br> course [COM 316 Gender and Communication, SOC 352 Social <br> Change] <br> General Studies (HU or <br> SB) upper division 3 NTR 450 Lifecycle Nutrition [SB] OR ALD 420 Health Issues of <br> OIder Adults OR equivalent upper division (HU or SB) course [CDE <br> 430 Infant/Toddler Development, EDP 313 Childhood and <br> Adolescence, SOC 427 Sociology of Health/Iliness] |  |  |

## III. B.A.S. Health Sciences Area Core (9 credits)

| EXW 300 Fundamentals of Wellness | 3 |
| :--- | :--- |
| HSC 420 Evaluation of Health Sciences Research | 3 |
| HSC 300 Complementary Health Care | 3 |

## IV. Health Sciences Concentration (26-29 credits): Select from the following.

Professional Communication and Education: Select at least 9 credits
AFS 494 Health Education Health Promotion in Black Communities [ 3 cr ]
COM 316 Gender and Communication [ 3 cr ] [SB \& C]
COM 371 Language, Culture and Communication[ 3 cr [ [SB \& C \& G]
COM 410 Interpersonal Communication Theory and Research [3 cr] [SB]
EDP 310 Selected topics such as Motivation; Learning and Memory [3 cr] [SB]
EXW 342 Health Behavior Change [ 3 cr ]
EXW 346 Health Promotion and Program Evaluation [3 cr]
JMC 445 Science and Medical Writing [3 cr]
NTR 300 Computer Applications in Nutrition [3 cr] [CS]
NTR 350 Nutrition Counseling [ 3 cr ] [SB]
NTR 351 Nutrition and Health Communication [3 cr]
NTR 494 ST: Nutrition and the Media [ 3 cr ]
PSY 320 Learning and Memory [ 3 cr ]

TWC 401 Principles of Technical Communication [3cr] [L]
TWC 411 Principles of Visual Communication [3 cr] [L]
TWC 446 Technical and Scientific Reports [3cr] [L]
Vulnerable Populations: Select at least $6 \mathbf{c r}$
ASB 321 Indians of the Southwest [3 cr] [(L or SB) \& H \& C]
ASB 342 Mexico-US Borderlands [3 cr] [SB]
ASB 353 Death and Dying: Cross Cultural Perspectives [ 3 cr ] [(HU or SB) \& G]
EXW 450 Cultural \& Social Issues in Exercise \& Wellness [3 cr][L or SB;C]
FAS 370 Family, Ethnic and Cultural Diversity [ 3 cr ] [SB \& C]
GRN 420 Health Aspects of Aging [3 cr] [SB]
HST 325 Immigration and Ethnicity in the US [3 cr] [SB \& H \& C]
NTR 348 Cultural Aspects of Food [3 cr] [SB \& C \& G]
SOC 353 Death and Dying: Cross Cultural Perspectives [ 3 cr ] [(HU or SB) \& G]
SOC 418 Aging and the Life Course [ 3 cr [SB]
SOC 424 Women and Health [ 3 cr ] [L or SB]
SOC 427 Sociology of Health and Illness [3 cr] [L or SB]
SSH 301 Global History of Health [3 cr] [SB, H]
SSH 404 Culture and Health [ 3 cr ]
TLC 321 Transborder Community Development and Health (3 cr)
TLC 323 Latino Health Issues ( 4 cr ) [SB, C]

TCL 327 Health and Migration [ 3 cr ] [L or SB]
TCL 422 US-Mexico Border Health [ 3 cr ]
WST 300 Women in Contemporary Society [3 cr] [SB \& C]
WST 394 Women and International Health [3 cr]
Policy and Organizations: No minimum required
BIO 494 Current Issues in US Public Health [ 3 cr ]
MGT 300 Organizational Management and Leadership [ 3 cr ]
MGT 310 Collaborative Team Skills [ 3 cr ]
PGS 458 Group Dynamics [ 3 cr ]
POS 325 Public Policy Development [ 3 cr ]

Concentration Check sheet ( $\mathbf{2 6 - 2 9}$ credits)

| Professional Communication and Education | Credits |
| :--- | :--- |
|  | 3 |
|  | 3 |
|  | 3 |
| Vulnerable Populations | 3 |
|  | 3 |
| Remaining Course Selections | 3 |
|  | 3 |
|  | 3 |
|  | $2-5$ |

## 2011-2012 Major Map

## Exercise \& Wellness (Exercise \& Wellness), BS

School of Nutrition and Health Promotion
Campus:Downtown Phoenix
ECEXWBS

| Term 1 0-15 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Complete 2 courses: <br> BIO 201: Human Anatomy and Physiology I OR EXW 100: Introduction to Health and Wellness (SB) OR MAT 142: College Mathematics (MA) OR PGS 101: Introduction to Psychology (SB) | 6-7 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ASU 101: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Elective | 2 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 2 16-29 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> BIO 201: Human Anatomy and Physiology I OR BIO 202: Human Anatomy and Physiology II (SG) OR EXW 100: Introduction to Health and Wellness (SB) OR MAT 142: College Mathematics (MA) OR PGS 101: Introduction to Psychology (SB) | 6-7 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| EXW 214: Flexibility Instructional Competency Laboratory | 2 | C |  |
| Elective | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14-15 |  |  |
| Term 3 30-47 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| BIO 201: Human Anatomy and Physiology I OR <br> BIO 202: Human Anatomy and Physiology II (SG) OR EXW 100: Introduction to Health and Wellness (SB) OR EXW 300: Foundations of Exercise and Wellness (SB) OR PGS 101: Introduction to Psychology (SB) | 6-7 | C |  |
| CHM 101: Introductory Chemistry (SQ) | 4 | C |  |
| COM 225: Public Speaking (L) | 3 | C |  |
| EXW 216: Muscular Strength Instructional Competency Laboratory | 2 | C |  |
| Elective | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 1 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 18-19 |  |  |
| Term 4 48-61 Credit Hours | Hours | Minimum Grade | Notes |
| BIO 201: Human Anatomy and Physiology I OR <br> BIO 202: Human Anatomy and Physiology II (SG) OR EXW 100: Introduction to Health and Wellness (SB) OR EXW 300: Foundations of Exercise and Wellness (SB) OR PGS 101: Introduction to Psychology (SB) | 6-7 | C |  |
| EXW 218: Cardiovascular Instructional Competency Laboratory | 2 | C |  |
| EXW 310: Computer Skills and Technology for Exercise and Wellness (CS) | 3 | C |  |



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EXW 460: Resistance Training Application
and Theory
EXW 493: Honors Thesis (L)
EXW 494: Special Topics
EXW 499: Individualized Instruction
HSC 300: Complementary Healthcare
NTR 340: Applications in Human Nutrition
NTR 341: Introduction to Planning
Therapeutic Diets
NTR 345: Development of Healthy Cuisines
NTR 346: Sports Nutrition
NTR 348: Cultural Aspects of Food (SB & C
& G)
NTR 350: Nutrition Counseling (SB)
NTR 351: Nutrition and Health
Communications (L)
NTR 394: Special Topics
NTR 440: Advanced Human Nutrition I
NTR 450: Nutrition in the Life Cycle I (SB)
NTR 451: Nutrition in the Life Cycle II
NTR 494: Special Topics
PGS 350: Social Psychology (SB)
SOC 424: Women and Health (SB)
SOC 427: Sociology of Health and Illness
(SB)
SOC 352: Social Change (SB & G & H)
EXW 350: Substance Abuse and Addictive
Behavior
EXW 446: Health Promotion and Program
Evaluation
```

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map

## Exercise \& Wellness (Health Promotion), BS

School of Nutrition and Health Promotion
Campus:Downtown Phoenix
ECEXWHBS


| Term 5 57-71 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| EXW 320: Program Development and Leadership | 3 | C |  |
| EXW 335: Physical Activity and Fitness Concepts | 3 |  |  |
| EXW 342: Health Behavior Change | 3 | C |  |
| EXW 400: Stress Management for Wellness | 3 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 72-86 Credit Hours | Hours | Minimum Grade | Notes |
| EXW 350: Substance Abuse and Addictive Behavior | 3 | C |  |
| EXW 498: Epidemiology | 3 | C |  |
| EXW 442: Physical Activity in Health and Disease (L) | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 87-101 Credit Hours | Hours | Minimum Grade | Notes |
| EXW 446: Health Promotion and Program Evaluation | 3 | C |  |
| EXW 450: Cultural and Social Issues in Exercise and Wellness ((L or SB) \& C) | 3 | C |  |
| Complete 3 courses: Elective | 9 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 102-120 Credit Hours | Hours | Minimum Grade | Notes |
| EXW 484: Internship | 6 | C |  |
| Upper Division Elective | 3 |  |  |
| Complete 3 courses: Elective | 10 |  |  |
| Term hours subtotal: | 19 |  |  |
| Concentration Course |  |  |  |
| ASB 353: Death and Dying in Cross-Cultural Perspective ((HU or SB) \& G) |  |  |  |
| BUA 330: Organizational Leadership |  |  |  |
| BUA 381: Small Business Accounting and Finance |  |  |  |
| BUA 382: Small Business Sales and Market Development |  |  |  |
| BUA 383: Small Business Working Relationships |  |  |  |
| ENG 301: Writing for the Professions (L) |  |  |  |
| EXW 311: Special Populations in Exercise and Wellness |  |  |  |
| EXW 315: Physiological Foundations of Movement |  |  |  |
| EXW 330: Kinesiological Foundations of Movement |  |  |  |
| EXW 380: Body Image and Wellness |  |  |  |
| EXW 394: Special Topics |  |  |  |
| EXW 420: Exercise Testing |  |  |  |
| EXW 425: Exercise Prescription |  |  |  |


| EXW 460: Resistance Training Application and Theory |  |  |
| :---: | :---: | :---: |
| EXW 493: Honors Thesis (L) |  |  |
| EXW 494: Special Topics |  |  |
| EXW 499: Individualized Instruction |  |  |
| HSC 300: Complementary Healthcare |  |  |
| NTR 340: Applications in Human Nutrition |  |  |
| NTR 341: Introduction to Planning Therapeutic Diets |  |  |
| NTR 345: Development of Healthy Cuisines |  |  |
| NTR 346: Sports Nutrition |  |  |
| NTR 348: Cultural Aspects of Food (SB \& C \& G) |  |  |
| NTR 350: Nutrition Counseling (SB) |  |  |
| NTR 351: Nutrition and Health Communications (L) |  |  |
| NTR 394: Special Topics |  |  |
| NTR 440: Advanced Human Nutrition I |  |  |
| NTR 450: Nutrition in the Life Cycle I (SB) |  |  |
| NTR 451: Nutrition in the Life Cycle II |  |  |
| NTR 494: Special Topics |  |  |
| PGS 350: Social Psychology (SB) |  |  |
| SOC 424: Women and Health (SB) |  |  |
| SOC 427: Sociology of Health and Illness (SB) |  |  |
| Total Hours: 120 <br> Upper Division Hours: 45 minimum <br> Major GPA: 2.00 minimum <br> Cumulative GPA: 2.00 minimum <br> Total hrs at ASU: 30 minimum <br> Hrs Resident Credit for <br> Academic Recognition: 56 minimum <br> Total Community College Hrs: 64 maximum | General University Requirements Legend <br> General Studies Core Requirements: <br> - Literacy and Critical Inquiry (L) <br> - Mathematical Studies (MA) <br> - Computer/Statistics/Quantitative Applications (CS) <br> - Humanities, Fine Arts and Design (HU) <br> - Social and Behavioral Sciences (SB) <br> - Natural Science - Quantitative (SQ) <br> - Natural Science - General (SG) | General Studies Awareness Requirements: <br> - Cultural Diversity in the U.S. (C) <br> - Global Awareness (G) <br> - Historical Awareness (H) <br> First-Year Composition |

[^23]
## 2011-2012 Major Map

## Health Sciences (Health Policy), BS

School of Nutrition and Health Promotion
Campus:Downtown Phoenix
NUHSCHPBS

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{\text {! }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 9 MAT 142: College Mathematics (MA) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ASU 101: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Global Awareness (G) | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-29 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| 4 HSC 210: Cultural Aspects of Health | 3 | C |  |
| 4. PGS 101: Introduction to Psychology (SB) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| PHI 101: Introduction to Philosophy (HU) | 3 |  |  |
| Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 30-45 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| NTR 100: Introductory Nutrition OR <br> NTR 241: Human Nutrition | 3 | C |  |
| TCL 201: Transborder Society and Culture I: Interdisciplinary Approaches (HU \& C) | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Elective | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |


| Term 4 46-60 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 301: Writing for the Professions (L) OR <br> NTR 351: Nutrition and Health Communications (L) OR <br> TWC 301: General Principles of Multimedia Writing (L) OR <br> TWC 347: Written Communication for Managers (L) OR <br> TWC 446: Technical and Scientific Reports (L) OR <br> Upper Division Literacy and Critical Inquiry (L) | 3 | C |  |
| SOC 390: Social Statistics I (CS) OR <br> STP 226: Elements of Statistics (CS) OR SWU 321: Statistics for Social Workers (CS) OR Computer/Statistics/Quantitative Applications (CS) | 3 | C |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Complete 2 courses: Elective | 6 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 61-75 Credit Hours | Hours | Minimum Grade | Notes |
| HSC 300: Complementary Healthcare | 3 | C |  |


POS 220: Political Issues and Public Policy
(SB)
POS 325: Public Policy Development (SB)
TCL 321: Transborder Community
Development and Health
TCL 323: Latino Health Issues (SB \& C)
TCL 326: Health of Chicanas and Latinas (SB
\& C)
TCL 422: U.S.-Mexico Border Health

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum Cumulative GPA: 2.00 minimum Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> Health Sciences (Healthy Lifestyles Coaching), BS

School of Nutrition and Health Promotion
Campus:Downtown Phoenix
NUHSCHLCBS

| Term 1 $0-14$ Credit Hours Critical course signified by | Hours | Minimum <br> Grade |
| :--- | :--- | :---: |
| CHM 101: Introductory Chemistry (SQ) | 4 | C |
| ASU 101: The ASU Experience | 1 |  |
| ENG 101 or ENG 102: First-Year Composition OR | 3 | C |
| ENG 105: Advanced First-Year Composition OR |  |  |
| ENG 107 or ENG 108: English for Foreign Students |  | 3 |
| MAT 142: College Mathematics (MA) | Term hours subtotal: | 14 |
| Humanities, Fine Arts and Design (HU) |  | C |

- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics course
- ASU 101 or College specific equivalent First Year Seminar required of all freshman students.

| Term 2 15-29 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 HSC 210: Cultural Aspects of Health | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| PGS 101: Introduction to Psychology (SB) | 3 |  |  |
| PHI 101: Introduction to Philosophy (HU) | 3 | C |  |
| Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 30-45 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 1. BIO 201: Human Anatomy and Physiology I (SG) | 4 | C |  |
| ENG 215 OR ENG 216 OR ENG 301 OR TWC 301 OR TWC 347 OR TWC 401 OR Upper Division Literacy and Critical Inquiry (L) | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 | C |  |
| Complete 2 courses: <br> Elective OR <br> Minor Course | 6 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 46-61 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 4 BIO 202: Human Anatomy and Physiology II (SG) | 4 | C |  |
| 4 NTR 241: Human Nutrition | 3 | C |  |
| EXW 100: Introduction to Health and Wellness (SB) | 3 | C |  |
| Complete 2 courses: <br> Elective OR <br> Minor Course | 6 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 62-76 Credit Hours | Hours | Minimum Grade | Notes |
| EXW 325: Fitness for Life | 3 | C |  |
| HSC 300: Complementary Healthcare | 3 | C |  |


| NTR 340: Applications in Human Nutrition |  | 3 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| NTR 345: Development of Healthy Cuisines |  | 3 |  |  |
| NTR 348: Cultural Aspects of Food (SB \& C \& G) |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 77-91 Credit Hours |  | Hours | Minimum Grade | Notes |
| EXW 342: Health Behavior Change |  | 3 | C |  |
| EXW 350: Substance Abuse and Addictive Behavior |  | 3 | C |  |
| NTR 350: Nutrition Counseling (SB) |  | 3 | C |  |
| NTR 351: Nutrition and Health Communications (L) |  | 3 | C |  |
| Elective OR <br> Minor Course |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 92-106 Credit Hours |  | Hours | Minimum Grade | Notes |
| EXW 400: Stress Management for Wellness |  | 3 | C |  |
| HSC 320: Applied Medical/Healthcare Ethics |  | 3 | C |  |
| HSC 330: Healthcare Systems in the U.S. |  | 3 | C |  |
| HSC 494: Special Topics |  | 3 | C |  |
| Elective OR Minor Course |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 107-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| HSC 420: Evaluation of Health Sciences Research |  | 3 | C |  |
| HSC 499: Individualized Instruction |  | 2 | C |  |
| NTR 450: Nutrition in the Life Cycle I (SB) |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Elective OR Minor Course |  | 3 |  |  |
| Term hours subtotal: |  | 14 |  |  |
| Minor in Nonprofit Administration | Medical/Technical Writing Communications | Sugge | eneral Studi |  |
| NLM 160: Voluntary Action and Community Leadership (SB) | ENG 215: Strategies of Academic Writing (L) | PHI 103: Principles of Sound Reasoning (L or $\mathrm{HU})$ |  |  |
| NLM 220: Introduction to Nonprofit Organizations | ENG 216: Persuasive Writing on Public Issues (L) | MIC | icrobiology |  |
|  | ENG 301: Writing for the Professions (L) | CDE 232: Human Development (SB) |  |  |
| NLM 300: Fund Raising and Resource Development | TWC 301: General Principles of Multimedia Writing (L) | SOC 353: Death and Dying in Cross-Cultural Perspective ((HU or SB) \& G) |  |  |
| NLM 301: Sustainable Communities |  |  |  |  |
| NLM 302: Inclusive Community Development (C) | TWC 347: Written Communication for Managers (L) | SOC 427: Sociology of Health and Illness (SB) |  |  |
| NLM 310: Volunteer Management | TWC 401: Principles of Technical Communication (L) |  |  |  |
| NLM 435: Service Learning for Community Development | TWC 446: Technical and Scientific Reports (L) |  |  |  |
| NLM 494: Special Topics |  |  |  |  |
| PRM 424: Recreation Program Management |  |  |  |  |
| Suggested Electives |  |  |  |  |
| EXW 380: Body Image and Wellness |  |  |  |  |
| NTR 300: Computer Applications in Nutrition (CS) |  |  |  |  |
| NTR 346: Sports Nutrition |  |  |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Health Sciences (Pre-professional), BS

School of Nutrition and Health Promotion
Campus:Downtown Phoenix
NUHSCPREBS

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| ASU 101: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| PHI 101: Introduction to Philosophy (HU) | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-28 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C | - Pre-Pharmacy students are approved to substitute MAT 251 with MAT 270 Calculus with Analytic Geometry I (4) [MA] |
| CHM 113: General Chemistry I (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 251: Calculus for Life Sciences (MA) | 3 | C |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 29-42 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| 1 BIO 201: Human Anatomy and Physiology I (SG) | 4 | C | - Pre-Veterinary students are approved to substitute BIO 201 with BIO 360 Animal Physiology (3) and a 1 credit hour elective |
| 4 CHM 116: General Chemistry II (SQ) | 4 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |

1 Complete First-Year Composition requirement.
Complete Mathematics (MA) requirement.
Term hours subtotal: 14

| Term 4 43-60 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 BIO 202: Human Anatomy and Physiology II (SG) | 4 | C | - Pre-Veterinary students are approved to substitute BIO 202 with BIO 331 Animal Behavior (3) and a 1 credit hour elective - Pre-Veterinary students are approved to substitute NTR 241 with ABS 378 Wildlife Nutrition (3) |
| CHM 233: General Organic Chemistry I AND <br> CHM 237: General Organic Chemistry Laboratory I | 4 | C |  |
| MIC 220: Biology of Microorganisms AND <br> MIC 206: Microbiology Laboratory (SG) OR <br> MIC 205: Microbiology (SG) AND <br> MIC 206: Microbiology Laboratory (SG) | 4 | C |  |
| NTR 241: Human Nutrition | 3 | C |  |
| Upper Division Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. <br> (C) OR <br> Upper Division Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Upper Division Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 18 |  |  |
| Term 5 61-77 Credit Hours | Hours | Minimum Grade | Notes |


| CHM 234: General Organic Chemistry II AND <br> CHM 238: General Organic Chemistry Laboratory II | 4 | C |  |
| :---: | :---: | :---: | :---: |
| HSC 420: Evaluation of Health Sciences Research | 3 | C |  |
| PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) | 4 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR <br> Upper Division Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Upper Division Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 6 78-91 Credit Hours | Hours | Minimum Grade | Notes |
| CHM 234: General Organic Chemistry II AND CHM 238: General Organic Chemistry Laboratory II | 4 | C |  |
| HSC 300: Complementary Healthcare | 3 | C |  |
| PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) | 4 | C |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 7 92-107 Credit Hours | Hours | Minimum Grade | Notes |
| BCH 361: Principles of Biochemistry AND BCH 367: Elementary Biochemistry Laboratory | 4 | C |  |
| HSC 320: Applied Medical/Healthcare Ethics | 3 | C |  |
| Upper Division Medical/Technical Writing Communications AND Upper Division Literacy and Critical Inquiry (L) | 3 | C |  |
| Complete 2 courses: Upper Division Elective | 6 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 8 108-120 Credit Hours | Hours | Minimum Grade | Notes |
| BIO 340: General Genetics | 4 | C |  |
| HSC 400: Practicum in Health Sciences | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 13 |  |  |


| Medical/Technical Writing Communications | Suggested General Studies |
| :---: | :---: |
| ENG 301: Writing for the Professions (L) | ALD 420: Health Issues and Older Adults (SB) |
| NTR 351: Nutrition and Health Communications (L) |  |
|  | BIO 318: History of Medicine (H) |
| TWC 301: General Principles of Multimedia Writing (L) | PGS 101: Introduction to Psychology (SB) |
|  | PHI 103: Principles of Sound Reasoning (L or HU) |
| TWC 347: Written Communication for Managers (L) |  |
| TWC 401: Principles of Technical Communication (L) | SOC 353: Death and Dying in Cross-Cultural Perspective ((HU or SB) \& G) |
|  | SOC 424: Women and Health (SB) |
| TWC 446: Technical and Scientific Reports (L) |  |
|  | SOC 427: Sociology of Health and Illness (SB) |
|  | GRN 420: Health Issues and Older Adults (SB) |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4) ARIZONA State UNIVERSITY

## 2011-2012 Major Map <br> Kinesiology, BS

School of Nutrition and Health Promotion
Campus:Downtown Phoenix
NUKINBS

| Term 1 0-17 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. KIN 101: Introduction to Kinesiology | 3 | B- | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ASU 101: The ASU Experience | 1 | C |  |
| BIO 181: General Biology I (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| KIN 194: Forager/Couch Potato:Obesity/Diabetes Epidemics OR Social and Behavioral Sciences (SB) | 3 | C |  |
| MAT 170: Precalculus (MA) OR Elective | 3 | C |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| Minimum 3.00 GPA in KIN. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 2 18-31 Credit Hours | Hours | Minimum Grade | Notes |
| CHM 101: Introductory Chemistry (SQ) OR CHM 113: General Chemistry I (SQ) | 4 | C |  |
| 4 MAT 251: Calculus for Life Sciences (MA) | 3 | C |  |
| BIO 182: General Biology II (SG) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| Minimum 3.00 GPA in KIN. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 32-45 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 4 BIO 201: Human Anatomy and Physiology I (SG) | 4 | C |  |
| !. CHM 113: General Chemistry I (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C |  |
| 4 PGS 101: Introduction to Psychology (SB) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| Minimum 3.00 GPA in KIN. |  |  |  |
| 1. Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 46-59 Credit Hours | Hours | Minimum Grade | Notes |
| 4 BIO 202: Human Anatomy and Physiology II (SG) | 4 | C |  |
| PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) | 4 | C |  |
| CHM 116: General Chemistry II (SQ) OR Elective | 3-4 | C |  |
| Global Awareness (G) | 3 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
|  |  |  |  |


| Term 5-75 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| KIN 345: Motor and Developmental Learning |  | 3 | C |  |
| KIN 352: Psychosocial Aspects of Physical Activity (SB \& C) |  | 3 | C |  |
| PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) |  | 4 | C |  |
| PSY 230: Introduction to Statistics (CS) OR STP 226: Elements of Statistics (CS) |  | 3 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |  |
| Minimum 3.00 GPA in KIN. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 6 76-91 Credit Hours |  | Hours | Minimum Grade | Notes |
| KIN 335: Biomechanics |  | 3 | C |  |
| KIN 340: Physiology of Exercise |  | 3 | C |  |
| PSY 290: Research Methods (L or SG) |  | 4 | C |  |
| KIN Upper Division Elective |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |  |
| Minimum 3.00 GPA in KIN. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 7 92-104 Credit Hours |  | Hours | Minimum Grade | Notes |
| KIN 494: Pre-Internship Workshop |  | 1 | C | - The following courses will satisfy a Literacy (L) and Additional KIN List Course: KIN 414, 421, 422, 423, 441, 443, 448, 460 |
| PGS 466: Abnormal Psychology (SB) |  | 3 | C |  |
| Upper Division KIN course (L) |  | 3 | C |  |
| KIN Upper Division Elective |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |  |
| Minimum 3.00 GPA in KIN. |  |  |  |  |
|  | Term hours subtotal: | 13 |  |  |
| Term 8 105-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| KIN 484: Internship |  | 3 | C |  |
| Complete 3 courses: <br> KIN Upper Division Elective |  | 9 | C |  |
| Upper Division Elective |  | 4 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |  |
| Minimum 3.00 GPA in KIN. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |

## KIN Upper Division Elective

KIN 334: Functional Anatomy and Kinesiology

KIN 412: Biomechanics of the Skeletal System

KIN 413: Qualitative Analysis in Sport
Biomechanics
KIN 414: Electromyographic Kinesiology (L)
KIN 421: Human Motor Control (L)
KIN 422: Motor Control in Special
Populations (L)
KIN 423: Motor Control and Aging (L)

KIN 440: Exercise Biochemistry
KIN 441: Physiology of Women in Sport (L)
KIN 442: Fuel Metabolism
KIN 443: Exercise Endocrinology (L)
KIN 444: Metabolic Adaptations to Exercise Training

KIN 445: Exercise Physiology for Children and Adolescents

KIN 450: Biopsychosocial Perspectives on Physical Activity and Health

KIN 452: Exercise Psychology (SB)
KIN 460: Theory of Strength Training (L)
KIN 492: Research
KIN 493: Honors Thesis (L)
KIN 494: EKG Interpretation, Muscle Physiology

KIN 498: Kinesiology and the Future
KIN 499: Individualized Instruction

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 3.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## Hrs Resident Credit for

Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Nutrition (Dietetics), BS

School of Nutrition and Health Promotion Campus:Downtown Phoenix
ECNTRDBS

| Term 1 0-15 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. CHM 101: Introductory Chemistry (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students <br> - Minimum grade of C required for Didactic Program in Dietetics (DPD) verification statement |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 NTR 150: Introduction to the Professions in Nutrition and Dietetics | 1 | C |  |
| 4 PGS 101: Introduction to Psychology (SB) | 3 | C |  |
| ASU 101: The ASU Experience | 1 |  |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| 4 Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Minimum 2.75 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 2 16-30 Credit Hours Critical course signified by 9 | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 1 NTR 241: Human Nutrition | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Elective | 3 |  |  |
| Minimum 2.75 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 31-46 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 4 BIO 201: Human Anatomy and Physiology I (SG) | 4 | C |  |
| NTR 341: Introduction to Planning Therapeutic Diets | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Elective | 3 |  |  |
| Elective | 3 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 1. Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 47-62 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 1 BIO 202: Human Anatomy and Physiology II (SG) | 4 | C |  |
| 4 NTR 142: Applied Food Principles | 3 | C |  |
| ENG 301: Writing for the Professions (L) OR <br> NTR 351: Nutrition and Health Communications (L) OR <br> TWC 301: General Principles of Multimedia Writing (L) | 3 | C |  |


| Computer/Statistics/Quantitative Applications (CS) |  | 3 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| Elective |  | 3 |  |  |
| Minimum 3.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 5 63-76 Credit Hours |  | Hours | Minimum Grade | Notes |
| CHM 231: Elementary Organic Chemistry (SQ) AND CHM 235: Elementary Organic Chemistry Laboratory (SQ) |  | 4 | C |  |
| MIC 205: Microbiology (SG) AND MIC 206: Microbiology Laboratory (SG) |  | 4 | C |  |
| NTR 343: Food Service Purchasing |  | 3 | C |  |
| NTR 344: Nutrition Services Management (L) |  | 3 | C |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 6 77-92 Credit Hours |  | Hours | Minimum Grade | Notes |
| BCH 361: Principles of Biochemistry AND BCH 367: Elementary Biochemistry Laboratory |  | 4 | C |  |
| NTR 340: Applications in Human Nutrition |  | 3 | C |  |
| NTR 350: Nutrition Counseling (SB) |  | 3 | C |  |
| NTR 444: Medical Nutrition Therapy |  | 3 | C |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 7 93-107 Credit Hours |  | Hours | Minimum Grade | Notes |
| NTR 440: Advanced Human Nutrition I |  | 3 | C |  |
| NTR 445: Management of Food Service Systems |  | 3 | C |  |
| NTR 450: Nutrition in the Life Cycle I (SB) |  | 3 | C |  |
| NTR 448: Community Nutrition (L) |  | 3 | C |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 108-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| NTR 400: Preprofessional Preparation in Dietetics |  | 3 | C |  |
| NTR 441: Advanced Human Nutrition II |  | 3 | C |  |
| NTR 446: Human Nutrition Assessment Lecture/Laboratory |  | 3 | C |  |
| Elective |  | 3 |  |  |
| Elective |  | 1 |  |  |
|  | Term hours subtotal: | 13 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4 UNIVERSITY

## 2011-2012 Major Map <br> Nutrition (Food \& Nutrition Management), BS

School of Nutrition and Health Promotion
Campus:Downtown Phoenix
ECNTRMBS

| Term 1 0-14 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ASU 101: The ASU Experience | 1 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| PGS 101: Introduction to Psychology (SB) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| NTR 150: Introduction to the Professions in Nutrition and Dietetics OR Elective | 1 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-30 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 CHM 101: Introductory Chemistry (SQ) | 4 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| NTR 100: Introductory Nutrition OR NTR 241: Human Nutrition | 3 | C |  |
| MIC 205: Microbiology (SG) AND <br> MIC 206: Microbiology Laboratory (SG) | 4 |  |  |
| Complete 3 courses: Elective | 8 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 46-60 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 NTR 142: Applied Food Principles | 3 | C |  |
| Upper Division Social and Behavioral Sciences (SB) OR <br> Upper Division Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) OR <br> Cultural Diversity in the U.S. (C) OR <br> Global Awareness (G) | 3 |  |  |
| Complete 3 courses: Elective | 9 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 61-75 Credit Hours | Hours | Minimum Grade | Notes |


| NTR 345: Development of Healthy Cuisines |  | 3 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| NTR 344: Nutrition Services Management (L) |  | 3 | C |  |
| BUA 381: Small Business Accounting and Finance |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| NTR 300: Computer Applications in Nutrition (CS) |  | 3 | C |  |
| ENG 301: Writing for the Professions (L) OR <br> TWC 301: General Principles of Multimedia Writing (L) |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
| Complete 2 courses: <br> Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| NTR 343: Food Service Purchasing |  | 3 | C |  |
| NTR Upper Division Elective |  | 3 | C |  |
| BUA 380: Small Business Leadership OR <br> MGT 300: Organization and Management Leadership OR <br> MGT 380: Management and Strategy for Nonmajors OR MGT 394: Special Topics |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| NTR 401: Professional Practice in Food Service Management |  | 3 | C |  |
| NTR 445: Management of Food Service Systems |  | 3 | C |  |
| BUA 382: Small Business Sales and Market Development OR <br> MKT 300: Marketing and Business Performance OR <br> MKT 394: Special Topics OR <br> MKT 395: Essentials of Advertising and Marketing Communication |  | 3 |  |  |
| NTR 442: Experimental Functional Foods |  | 3 | C |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum Cumulative GPA: 2.00 minimum Total hrs at ASU: 30 minimum Hrs Resident Credit for Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Nutrition (Nutrition Communication), BS

School of Nutrition and Health Promotion
Campus:Downtown Phoenix
ECNTRCBS

| Term 1 0-14 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ASU 101: The ASU Experience | 1 |  |  |
| MAT 142: College Mathematics (MA) | 3 |  |  |
| NTR 150: Introduction to the Professions in Nutrition and Dietetics OR Elective | 1 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Elective | 3 |  |  |
| 4 Maintain 2.00 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-30 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 1. CHM 101: Introductory Chemistry (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Complete 2 courses: <br> Elective | 6 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-45 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| NTR 100: Introductory Nutrition OR NTR 241: Human Nutrition | 3 | C |  |
| Humanities, Fine Arts and Design (HU) OR Social and Behavioral Sciences (SB) | 3 |  |  |
| Complete 3 courses: Elective | 9 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 46-60 Credit Hours | Hours | Minimum Grade | Notes |
| NTR 142: Applied Food Principles | 3 |  |  |
| Complete 2 courses: <br> MCO 120: Media and Society (SB) OR <br> MCO 240: Media Issues in American Pop Culture OR <br> MCO 418: History of Mass Communication (SB \& H) OR <br> MCO 430: International Mass Communication (G) OR <br> MCO 460: Race, Gender, and Media (C) OR <br> TWC 301: General Principles of Multimedia Writing (L) OR <br> TWC 401: Principles of Technical Communication (L) OR <br> TWC 411: Principles of Visual Communication (L) OR <br> ENG 216: Persuasive Writing on Public Issues (L) OR <br> ENG 412: Creative Nonfiction OR <br> ENG 475: Popular Periodical Writing OR <br> COM 263: Elements of Intercultural Communication (SB \& C \& G) OR <br> COM 316: Gender and Communication (SB \& C) OR <br> COM 320: Communication and Consumerism (SB) OR <br> FMS 351: Emerging Digital Media (L) OR <br> MCO 435: Social Media |  |  |  |
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| Statistics Course (CS) | 3 |  |  |


| Elective | 3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Term hours subtotal: | 15 |  |  |
| Term 5 61-74 Credit Hours |  | Hours | Minimum Grade | Notes |
| BIO 201: Human Anatomy and Physiology I (SG) |  | 4 |  |  |
| NTR 320: History of Human Nutrition |  | 3 | C |  |
| NTR 345: Development of Healthy Cuisines |  | 3 | C |  |
| ENG 301: Writing for the Professions (L) OR <br> TWC 301: General Principles of Multimedia Writing (L) |  | 3 |  |  |
| Elective |  | 1 |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 6 75-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| NTR 348: Cultural Aspects of Food (SB \& C \& G) |  | 3 | C |  |
| NTR 300: Computer Applications in Nutrition (CS) |  | 3 | C |  |
| BIO 202: Human Anatomy and Physiology II (SG) |  | 4 |  |  |
| MCO 418: History of Mass Communication (SB \& H) OR <br> MCO 430: International Mass Communication (G) OR <br> MCO 435: Social Media OR <br> MCO 460: Race, Gender, and Media (C) OR <br> TWC 301: General Principles of Multimedia Writing (L) OR <br> TWC 401: Principles of Technical Communication (L) OR <br> TWC 411: Principles of Visual Communication (L) OR <br> ENG 412: Creative Nonfiction OR <br> ENG 475: Popular Periodical Writing OR <br> COM 316: Gender and Communication (SB \& C) OR <br> COM 320: Communication and Consumerism (SB) OR <br> FMS 351: Emerging Digital Media (L) |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| NTR 351: Nutrition and Health Communications (L) |  | 3 | C |  |
| NTR 450: Nutrition in the Life Cycle I (SB) |  | 3 | C |  |
| Complete 2 courses: <br> MCO 418: History of Mass Communication (SB \& H) OR <br> MCO 430: International Mass Communication (G) OR <br> MCO 435: Social Media OR <br> MCO 460: Race, Gender, and Media (C) OR <br> TWC 301: General Principles of Multimedia Writing (L) OR <br> TWC 401: Principles of Technical Communication (L) OR <br> TWC 411: Principles of Visual Communication (L) OR <br> ENG 412: Creative Nonfiction OR <br> ENG 475: Popular Periodical Writing OR <br> COM 316: Gender and Communication (SB \& C) OR <br> COM 320: Communication and Consumerism (SB) OR <br> FMS 351: Emerging Digital Media (L) |  | 6 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| NTR 448: Community Nutrition (L) |  | 3 | C |  |
| NTR 401: Professional Practice in Food Service Management |  | 3 | C |  |
| NTR 494: Nutrition in the Media |  | 3 | C |  |
| MCO 418: History of Mass Communication (SB \& H) OR <br> MCO 430: International Mass Communication (G) OR <br> MCO 435: Social Media OR <br> MCO 460: Race, Gender, and Media (C) OR <br> TWC 301: General Principles of Multimedia Writing (L) OR <br> TWC 401: Principles of Technical Communication (L) OR <br> TWC 411: Principles of Visual Communication (L) OR <br> ENG 412: Creative Nonfiction OR <br> ENG 475: Popular Periodical Writing OR <br> COM 316: Gender and Communication (SB \& C) OR <br> COM 320: Communication and Consumerism (SB) OR <br> FMS 351: Emerging Digital Media (L) |  |  |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |

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Statistics Course (CS)
ABS 350: Applied Statistics (CS)
AGB 360: Agribusiness Statistics (CS)
PSY 230: Introduction to Statistics (CS)
SBS 304: Social Statistics I (CS)
SOC 390: Social Statistics I (CS)
STP 220: Conceptual Statistics
SWU 321: Statistics for Social Workers (CS)
```

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Nutrition (Human Nutrition), BS

School of Nutrition and Health Promotion
Campus:Downtown Phoenix
ECNTRHBS

| Term 1 0-15 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| . CHM 101: Introductory Chemistry (SQ) OR CHM 113: General Chemistry I (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - CHM 101 or 113 depending on preparation; see course description |
| ASU 101: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 170: Precalculus (MA) | 3 |  |  |
| NTR 150: Introduction to the Professions in Nutrition and Dietetics OR Elective | 1 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 2 16-31 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| CHM 113: General Chemistry I (SQ) OR CHM 116: General Chemistry II (SQ) | 4 | C | - CHM 113 and 116 are perquisites for CHM 233 in term 3 |
| 4 NTR 241: Human Nutrition | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 32-45 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 4 BIO 201: Human Anatomy and Physiology I (SG) | 4 | C |  |
| CHM 233: General Organic Chemistry I AND <br> CHM 237: General Organic Chemistry Laboratory I | 4 |  |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| 1 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 46-59 Credit Hours | Hours | Minimum Grade | Notes |
| BIO 202: Human Anatomy and Physiology II (SG) | 4 |  |  |
| CHM 234: General Organic Chemistry II AND CHM 238: General Organic Chemistry Laboratory II | 4 |  |  |
| NTR 142: Applied Food Principles | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 5 60-73 Credit Hours | Hours | Minimum Grade | Notes |


| NTR 341: Introduction to Planning Therapeutic Diets | 3 | C |  |
| :---: | :---: | :---: | :---: |
| NTR 450: Nutrition in the Life Cycle I (SB) | 3 | C |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Upper Division Elective | 2 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 6 74-89 Credit Hours | Hours | Minimum | Notes |
| BCH 361: Principles of Biochemistry AND BCH 367: Elementary Biochemistry Laboratory | 4 | C |  |
| NTR 340: Applications in Human Nutrition | 3 | C |  |
| NTR 444: Medical Nutrition Therapy | 3 | C |  |
| Elective | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 7 90-105 Credit Hours | Hours | Minimum Grade | Notes |
| MIC 205: Microbiology (SG) AND <br> MIC 206: Microbiology Laboratory (SG) | 4 |  |  |
| NTR 300: Computer Applications in Nutrition (CS) OR Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| NTR 346: Sports Nutrition | 3 | C |  |
| NTR 440: Advanced Human Nutrition I | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| NTR 441: Advanced Human Nutrition II | 3 | C |  |
| NTR 446: Human Nutrition Assessment Lecture/Laboratory | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Complete 2 courses: Elective | 6 |  |  |
| Term hours subtotal: | 15 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Nutrition (Nutrition Communication), BS

School of Nutrition and Health Promotion
Campus:Downtown Phoenix
ECNTRCBS


| Elective | 3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Term hours subtotal: | 15 |  |  |
| Term 5 61-74 Credit Hours |  | Hours | Minimum Grade | Notes |
| BIO 201: Human Anatomy and Physiology I (SG) |  | 4 |  |  |
| NTR 320: History of Human Nutrition |  | 3 | C |  |
| NTR 345: Development of Healthy Cuisines |  | 3 | C |  |
| ENG 301: Writing for the Professions (L) OR <br> TWC 301: General Principles of Multimedia Writing (L) |  | 3 |  |  |
| Elective |  | 1 |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 6 75-90 Credit Hours |  | Hours | Minimum Grade | Notes |
| NTR 348: Cultural Aspects of Food (SB \& C \& G) |  | 3 | C |  |
| NTR 300: Computer Applications in Nutrition (CS) |  | 3 | C |  |
| BIO 202: Human Anatomy and Physiology II (SG) |  | 4 |  |  |
| MCO 418: History of Mass Communication (SB \& H) OR <br> MCO 430: International Mass Communication (G) OR <br> MCO 435: Social Media OR <br> MCO 460: Race, Gender, and Media (C) OR <br> TWC 301: General Principles of Multimedia Writing (L) OR <br> TWC 401: Principles of Technical Communication (L) OR <br> TWC 411: Principles of Visual Communication (L) OR <br> ENG 412: Creative Nonfiction OR <br> ENG 475: Popular Periodical Writing OR <br> COM 316: Gender and Communication (SB \& C) OR <br> COM 320: Communication and Consumerism (SB) OR <br> FMS 351: Emerging Digital Media (L) |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| NTR 351: Nutrition and Health Communications (L) |  | 3 | C |  |
| NTR 450: Nutrition in the Life Cycle I (SB) |  | 3 | C |  |
| Complete 2 courses: <br> MCO 418: History of Mass Communication (SB \& H) OR <br> MCO 430: International Mass Communication (G) OR <br> MCO 435: Social Media OR <br> MCO 460: Race, Gender, and Media (C) OR <br> TWC 301: General Principles of Multimedia Writing (L) OR <br> TWC 401: Principles of Technical Communication (L) OR <br> TWC 411: Principles of Visual Communication (L) OR <br> ENG 412: Creative Nonfiction OR <br> ENG 475: Popular Periodical Writing OR <br> COM 316: Gender and Communication (SB \& C) OR <br> COM 320: Communication and Consumerism (SB) OR <br> FMS 351: Emerging Digital Media (L) |  | 6 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| NTR 448: Community Nutrition (L) |  | 3 | C |  |
| NTR 401: Professional Practice in Food Service Management |  | 3 | C |  |
| NTR 494: Nutrition in the Media |  | 3 | C |  |
| MCO 418: History of Mass Communication (SB \& H) OR <br> MCO 430: International Mass Communication (G) OR <br> MCO 435: Social Media OR <br> MCO 460: Race, Gender, and Media (C) OR <br> TWC 301: General Principles of Multimedia Writing (L) OR <br> TWC 401: Principles of Technical Communication (L) OR <br> TWC 411: Principles of Visual Communication (L) OR <br> ENG 412: Creative Nonfiction OR <br> ENG 475: Popular Periodical Writing OR <br> COM 316: Gender and Communication (SB \& C) OR <br> COM 320: Communication and Consumerism (SB) OR <br> FMS 351: Emerging Digital Media (L) |  |  |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |

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Statistics Course (CS)
ABS 350: Applied Statistics (CS)
AGB 360: Agribusiness Statistics (CS)
PSY 230: Introduction to Statistics (CS)
SBS 304: Social Statistics I (CS)
SOC 390: Social Statistics I (CS)
STP 220: Conceptual Statistics
SWU 321: Statistics for Social Workers (CS)
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Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map Criminal Justice \& Criminology, BS

College of Public Programs
Campus:Downtown Phoenix, Online
PPCRIMJBS

| Term 1 0-17 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 CRJ 100: Introduction to Criminal Justice (SB) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 is for ASU freshman students only and is not required for transfer students |
| ASU 101: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) OR Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 2 18-32 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| CRJ 201: Criminal Justice Crime Control Policies and Practices OR CRJ 225: Introduction to Criminology | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Interdisciplinary Requirement | 3 |  |  |
| PGS 101: Introduction to Psychology (SB) OR SOC 101: Introductory Sociology (SB) OR Elective | 3 |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| CRJ 201: Criminal Justice Crime Control Policies and Practices OR CRJ 225: Introduction to Criminology | 3 | C |  |
| CRJ 2** Elective | 3 | C |  |
| Interdisciplinary Requirement | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 49-63 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 4 CRJ 303: Statistical Analysis (CS) | 3 | C |  |
| CRJ 2** Elective | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Complete 2 courses: Elective | 6 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 64-78 Credit Hours | Hours | Minimum Grade | Notes |
| CRJ 302: Research Methods | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |


| Interdisciplinary Requirement | 3 |  |  |
| :---: | :---: | :---: | :---: |
| Upper Division Related Area Course | 3 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours | Hours | Minimum Grade | Notes |
| CRJ 308: Advanced Criminological Theory | 3 | C |  |
| CRJ 470: Discretionary Justice (L or SB) OR Upper Division Literacy and Critical Inquiry (L) | 3 | C |  |
| Complete 2 courses: <br> CRJ 3** Elective OR <br> CRJ 4** Elective | 6 | C |  |
| Upper Division Related Area Course | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours | Hours | Minimum Grade | Notes |
| CRJ 305: Gender, Crime, and Criminal Justice (C) OR CRJ 306: Race, Ethnicity, Crime, and Criminal Justice (C) | 3 | C |  |
| CRJ 3** Elective OR <br> CRJ 4** Elective | 3 | C |  |
| CRJ 4** Elective | 3 | C |  |
| Upper Division Related Area Course | 3 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: CRJ 4** Elective | 6 | C |  |
| Upper Division Elective | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 12 |  |  |

- Public Programs interdisciplinary requirement (must complete 3 courses from the following list).
- Courses must be taken in at least two different areas.
- It is recommended that courses at the 300 and 400 level be taken in terms 5-8.
- These courses should also be used to meet the university HU and SB General Studies requirement ( 15 hours combined; 6 hours in one area, 9 hours in the othe1 AND one course must be upper division).

| Related Area Courses | Area 1 | Area 2 |
| :---: | :---: | :---: |
| AFS 301: Race and Racism in Africa/African Diaspora (SB \& G) | PRM 120: Leisure and the Quality of Life (SB) | URB 240: Urban Policy (C) |
| AMS 412: Immigration and Human Rights | PRM 380: Wilderness and Parks in America | URB 300: Urban and Metropolitan Studies |
|  | (SB \& H) | PAF 410: Building Leadership Skills (SB) |
| ASB 410: Poverty, Social Justice, and Global Health ((L or SB) \& G) |  | PAF 411: Leadership and Change (SB) |
| ASM 459: Course not found |  |  |
| BIO 305: Biology Behind the Crime Scene (SG) |  |  |
| COM 326: Court Room Oratory |  |  |
| COM 325: Advanced Public Speaking (L) |  |  |
| COM 312: Communication, Conflict, and Negotiation |  |  |
| ENG 302: Business Writing (L) |  |  |
| ENG 311: Persuasive Writing (L) |  |  |
| FMS 468: Crime and Violence in American Film (HU) |  |  |

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HST 322: Constitutional History of the
United States Since 1865 (SB & H)
HST 325: Immigration and Ethnicity in the
United States (SB & H & C)
HST 327: Women in US History }1600\mathrm{ to
1880 ((HU or SB) & C & H)
HST 328: Women in US History, 1880-1980
((HU or SB) & C & H)
JUS 320: Community and Social Justice (SB
& C)
JUS 350: Immigration and Justice (SB & C)
JUS 410: Punishment: Logic and Approach
JUS 432: Racial Justice (L)
JUS 465: Death Penalty in the United States
(L)
PAF 410: Building Leadership Skills (SB)
PAF 411: Leadership and Change (SB)
PGS 350: Social Psychology (SB)
PHI 309: Social and Political Philosophy
(HU)
PHI 307: Philosophy of Law (HU)
PHI 360: Business and Professional Ethics
(HU)
PHI 406: Moral Dilemmas (L or HU)
POS 346: Problems of Democracy (HU)
POS 442: American Political Thought (HU)
POS 325: Public Policy Development (SB)
POS 370: Law and Society (SB)
POS 472: Constitutional Law II (SB)
REL 379: Religion, Nationalism, and Ethnic
Conflict (HU & G)
REL 381: Religion and Moral Issues (L or
HU)
SOC 340: The Sociology of Deviance (SB)
SOC 360: Sociological Psychology (SB)
SGS 343: Religion, Nationalism, and Ethnic
Conflict (HU & G)
SGS 394: Violence/Conflict/Human Right
SWU 494: Immigrants and Refugees
TCL 314: Transborder Regional Immigration
and Economy ((L or SB) & H & C)
URB 300: Urban and Metropolitan Studies
URB 305: Urban Governance
URB 410: Urban Leadership and
Collaborative Skills
Area 3
SWU 171: Introduction to Social Work (SB
& H)
SWU 250: Stress Management Tools (SB)
```

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

Hrs Resident Credit for

Computer/Statistics/Quantitative Applications (CS)

- Humanities, Fine Arts and Design (HU
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011－2012 Major Map Nonprofit Leadership \＆Management，BS

College of Public Programs
Campus：Downtown Phoenix WU⿴囗⿱一一厶儿，
PPNLMBS

| Term 1 0－17 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 NLM 160：Voluntary Action and Community Leadership（SB） | 3 | C | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> －ASU 101 is for ASU freshman students only and is not required for transfer students |
| 4 SOC 101：Introductory Sociology（SB） | 3 | C |  |
| ASU 101：The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students | 3 | C |  |
| NLM 191：First－Year Seminar | 1 | C |  |
| MAT 142：College Mathematics（MA） | 3 |  |  |
| Interdisciplinary Requirement | 3 |  |  |
| Milestone：Recommend meeting with advisor to discuss career field experience requirement． |  |  |  |
| Term hours subtotal： | 17 |  |  |
| Term 2 18－33 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 1 NLM 210：Community Services and Professions | 3 | C |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students | 3 | C |  |
| Humanities，Fine Arts and Design（HU）AND Cultural Diversity in the U．S．（C）OR Humanities，Fine Arts and Design（HU）AND Global Awareness（G）OR Humanities，Fine Arts and Design（HU）AND Historical Awareness（H） | 3 |  |  |
| Natural Science－Quantitative（SQ） | 4 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal： | 16 |  |  |
| Term 3 34－49 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 NLM 220：Introduction to Nonprofit Organizations | 3 | C |  |
| Computer／Statistics／Quantitative Applications（CS） | 3 |  |  |
| Humanities，Fine Arts and Design（HU）AND Cultural Diversity in the U．S．（C）OR Humanities，Fine Arts and Design（HU）AND Global Awareness（G）OR Humanities，Fine Arts and Design（HU）AND Historical Awareness（H） | 3 |  |  |
| Interdisciplinary Requirement | 3 |  |  |
| $\begin{aligned} & \text { Natural Science - Quantitative (SQ) OR } \\ & \text { Natural Science - General (SG) } \end{aligned}$ | 4 |  |  |
| 4 Complete First－Year Composition requirement． |  |  |  |
| 4 Complete Mathematics（MA）requirement． |  |  |  |
| Term hours subtotal： | 16 |  |  |
| Term 4 50－64 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 4 COM 225：Public Speaking（L） | 3 | C |  |
| Related Area Course | 3 | C |  |
| Interdisciplinary Requirement | 3 |  |  |
| Complete 2 courses： Elective | 6 |  |  |
| Term hours subtotal： | 15 |  |  |


| Term 5 65-79 Credit Hours |  | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: | :---: |
| NLM 301: Sustainable Communities |  | 3 | C |  |
| NLM 302: Inclusive Community Development (C) |  | 3 | C |  |
| NLM 310: Volunteer Management |  | 3 | C |  |
| NLM 380: Financial Management for Nonprofit Organizations |  | 3 | C |  |
| NLM 410: Social Entrepreneurship |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 80-94 Credit Hours |  | Hours | Minimum Grade | Notes |
| NLM 300: Fund Raising and Resource Development |  | 3 | C |  |
| PRM 303: Program Planning (L) |  | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) |  | 3 |  |  |
| Related Area Course |  | 6 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 95-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| NLM 402: Assessment and Evaluation of Community Services |  | 3 | C |  |
| NLM 403: Pre-Internship Workshop |  | 3 | C |  |
| NLM 430: Managing Nonprofit Organizations |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 2 |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| NLM 463: Senior Internship |  | 12 | C |  |
|  | Term hours subtotal: | 12 |  |  |

- Public Programs interdisciplinary requirement (must complete 3 courses from the following list).
- Courses must be taken in at least two different areas.
- It is recommended that courses at the 300 and 400 level be taken in terms 5-8*.
- These courses should also be used to meet the university HU and SB General Studies requirement ( 15 hours combined; 6 hours in one area, 9 hours in the othe AND one course must be upper division).
- NLM Related Area: must complete 3 courses from the following list.

| Area 3 | NLM Related Area | Area 1 |
| :---: | :---: | :---: |
| SWU 171: Introduction to Social Work (SB \& H) | ACC 382: Accounting and Financial Analysis | CRJ 100: The Justice System (SB) |
| SWU 250: Stress Management Tools (SB) | COM 259: Communication in Business and the Professions |  |
|  | COM 263: Elements of Intercultural Communication (SB \& C \& G) |  |
|  | MGT 380: Management and Strategy for Nonmajors |  |
|  | MKT 395: Essentials of Advertising and Marketing Communication |  |
|  | NLM 320: Professional Development Seminar |  |
|  | NLM 420: American Humanics Institute |  |
|  | NLM 435: Service Learning for Community Development |  |
|  | PRM 304: Recreation Planning and Facility Development |  |
|  | PRM 486: Special Events Management |  |

Area 2
URB 240: Urban Policy (C)
URB 300: Urban and Metropolitan Studies
PAF 410: Building Leadership Skills (SB)
PAF 411: Leadership and Change (SB)

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 4) ARIZONA STATE UNIVERSITY

## 2011-2012 Major Map Parks \& Recreation Management, BS

College of Public Programs
Campus:Downtown Phoenix
PPPRMBS

| Term 1 0-17 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 1 PRM 120: Leisure and the Quality of Life (SB) | 3 | C |  |
| ASU 101: The ASU Experience | 1 |  |  |
| PRM 191: First-Year Seminar | 1 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Interdisciplinary Requirement | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Milestone: Recommend meeting with advisor to discuss career field experience requirement.$\text { Term hours subtotal: } \quad 17$ |  |  |  |
|  |  |  |  |
| Term 2 18-33 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| PRM 210: Community Services and Professions. | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 34-48 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 1 COM 225: Public Speaking (L) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Global Awareness (G) | 3 |  |  |
| Interdisciplinary Requirement | 3 |  |  |
| Elective | 3 |  |  |
| 1 Complete First-Year Composition requirement. |  |  |  |


| Term 4 49-63 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Social and Behavioral Sciences (SB) OR Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Interdisciplinary Requirement | 3 |  |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Elective | 5 |  |  |
|  | Term hours subtotal: 15 |  |  |
| Term 5 64-78 Credit Hours | Hours | Minimum Grade | Notes |
| PRM 301: Sustainable Communities | 3 | C |  |
| PRM 303: Program Planning (L) | 3 | C |  |



- Public Programs interdisciplinary requirement (must complete 3 courses from the following list).
- Courses must be taken in at least two different areas.
- It is recommended that courses at the 300 and 400 level be taken in terms 5-8.
- These courses should also be used to meet the university HU and SB General Studies requirement ( 15 hours combined; 6 hours in one area, 9 hours in the othes AND one course must be upper division).
- PRM Related Area: Students may choose at least one of three areas, but must complete seven classes in total to complete the PRM Related Area.

| Area 1 | Area 2 | Area 3 |
| :---: | :---: | :---: |
| CRJ 100: The Justice System (SB) | URB 240: Urban Policy (C) | SWU 171: Introduction to Social Work (SB \& H) |
|  | URB 300: Urban and Metropolitan Studies |  |
|  | PAF 410: Building Leadership Skills (SB) | SWU 250: Stress Management Tools (SB) |
|  | PAF 411: Leadership and Change (SB) |  |
| PRM Related Area: Special Event Mgmt | PRM Related Area: Comm Rec | PRM Related Area: Nat Rec |
| PRM 486: Special Events Management | PRM 315: Community Recreation Systems | BIO 319: Environmental Science (Nonmajor) (G) |
| PRM 487: Advanced Special Events | PRM 368: Sports Management |  |
| Management |  | PRM 370: Natural Resource Recreation Planning and Management |
| TDM 345: Meeting and Convention Planning | PRM 475: Entrepreneurial Recreation and Tourism |  |
| TDM 350: Tourism Marketing |  | PRM 470: Environmental Interpretation and Education |
| PRM 488: Event Marketing and Promotion |  | TDM 480: Sustainable Tourism |
| PRM Electives |  |  |
| NLM 300: Fund Raising and Resource Development |  |  |
| NLM 310: Volunteer Management |  |  |
| PGS 350: Social Psychology (SB) |  |  |
| PRM 150: Outdoor Pursuits |  |  |
| PRM 340: Outdoor Survival |  |  |
| PUP 301: Introduction to Urban Planning (L) |  |  |
| TDM 205: Introduction to Travel and Tourism (G) |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011－2012 Major Map <br> Parks \＆Recreation Management（Therapeutic Recreation），BS

College of Public Programs
Campus：Downtown Phoenix WU⿴囗⿰丨丨コ一
PPPRMTRBS

| Term 1 0－17 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 PRM 120：Leisure and the Quality of Life（SB） | 3 | C | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> －ASU 101 is for ASU freshman students only and is not required for transfer students |
| PRM 191：First－Year Seminar | 1 | C |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students | 3 | C |  |
| ASU 101：The ASU Experience | 1 |  |  |
| MAT 142：College Mathematics（MA） | 3 | C |  |
| Humanities，Fine Arts and Design（HU） | 3 |  |  |
| Interdisciplinary Requirement | 3 |  |  |
| Milestone：Recommend meeting with advisor to discuss career field experience requirement． |  |  |  |
| Term hours subtotal： | 17 |  |  |
| Term 2 18－33 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| 4. PRM 210：Community Services and Professions． | 3 | C |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students | 3 | C |  |
| Computer／Statistics／Quantitative Applications（CS） | 3 |  |  |
| Natural Science－Quantitative（SQ） | 4 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal： | 16 |  |  |
| Term 3 34－49 Credit Hours Critical course signified by ${ }^{\text {！}}$ | Hours | Minimum Grade | Notes |
| 4 COM 225：Public Speaking（L） | 3 | C |  |
| BIO 201：Human Anatomy and Physiology I | 4 | C |  |
| Interdisciplinary Requirement | 3 |  |  |
| Complete 2 courses： Elective | 6 |  |  |
| 4 Complete First－Year Composition requirement． |  |  |  |
| 4 Complete Mathematics（MA）requirement． |  |  |  |
| Term hours subtotal： | 16 |  |  |
| Term 4 50－63 Credit Hours | Hours | Minimum Grade | Notes |
| BIO 202：Human Anatomy and Physiology II（SG） | 4 | C |  |
| CDE 232：Human Development（SB） | 3 | C |  |
| Humanities，Fine Arts and Design（HU） | 3 |  |  |
| Global Awareness（G） | 3 |  |  |
| Elective | 1 |  |  |
| Term hours subtotal： | 14 |  |  |
| Term 5 64－78 Credit Hours | Hours | Minimum Grade | Notes |
| PRM 301：Sustainable Communities | 3 | C |  |
| PRM 303：Program Planning（L） | 3 | C |  |


| PRM 304: Recreation Planning and Facility Development | 3 | C |  |
| :---: | :---: | :---: | :---: |
| PRM 364: Foundations of Therapeutic Recreation (SB) | 3 | C |  |
| PRM 400: Processes and Techniques in Therapeutic Recreation | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours | Hours | Minimum Grade | Notes |
| PGS 466: Abnormal Psychology (SB) | 3 | C |  |
| PRM 302: Inclusive Community Development (C) | 3 | C |  |
| PRM 401: Tourism Management | 3 | C |  |
| PRM 406: Program Design and Evaluation in Therapeutic Recreation | 3 | C |  |
| PRM 460: Assessment and Documentation in Therapeutic Recreation | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours | Hours | Minimum Grade | Notes |
| PRM 380: Wilderness and Parks in America (SB \& H) | 3 | C |  |
| PRM 402: Assessment and Evaluation of Community Services | 3 | C |  |
| PRM 413: Leadership \& Professional Development in Therapeutic Recreation | 3 | C |  |
| Interdisciplinary Requirement | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| PRM 463: Senior Internship | 12 | C |  |
| Term hours subtotal: | 12 |  |  |

- Public Programs interdisciplinary requirement (must complete 3 courses from the following list).
- Courses must be taken in at least two different areas.
- It is recommended that courses at the 300 and 400 level be taken in terms 5-8.
- These courses should also be used to meet the university HU and SB General Studies requirement ( 15 hours combined; 6 hours in one area, 9 hours in the othei AND one course must be upper division).

| Area 1 | Area 2 | Area 3 |
| :---: | :---: | :---: |
| CRJ 100: The Justice System (SB) | URB 240: Urban Policy (C) | SWU 171: Introduction to Social Work (SB \& H) |
|  | URB 300: Urban and Metropolitan Studies |  |
|  | PAF 410: Building Leadership Skills (SB) | SWU 250. Stress Management Tools (SB) |
|  | PAF 411: Leadership and Change (SB) |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4 1 ARIZONA State UNIVERSITY

## 2011-2012 Major Map

## Public Service \& Public Policy, BS

College of Public Programs

PPPAFBS

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {d }}$ |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| MAT 142: College Mathematics (MA) OR POS 110: Government and Politics (SB) OR SOC 101: Introductory Sociology (SB) |  | 6 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 is for ASU freshman students only and is not required for transfer students |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| ASU 101: The ASU Experience |  | 1 |  |  |
| Interdisciplinary Requirement |  | 3 |  |  |
| Global Awareness (G) OR Historical Awareness (H) |  | 3 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 2 17-32 Credit Hours Critical course signified by 9 |  | Hours | Minimum Grade | Notes |
| MAT 142: College Mathematics (MA) OR POS 110: Government and Politics (SB) OR SOC 101: Introductory Sociology (SB) |  | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| PAF 200: Public Service and Policy in the 21st Century |  | 3 | C |  |
| Interdisciplinary Requirement |  | 3 |  |  |
| Natural Science - Quantitative (SQ) |  | 4 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by ${ }^{\text {P }}$ |  | Hours | Minimum Grade | Notes |
| 4 PAF 201: Economics for Public Affairs |  | 3 | C |  |
| ENG 216: Persuasive Writing on Public Issues (L) |  | 3 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) |  | 4 |  |  |
| Global Awareness (G) OR Historical Awareness (H) |  | 3 |  |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 4 49-63 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| 4 PAF 301: Applied Statistics |  | 3 | C |  |
| PAF 311: Leadership and Change (SB) |  | 3 | C |  |
| URB 240: Urban Policy (C) |  | 3 | C |  |
| COM 225: Public Speaking (L) |  | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
|  |  |  | Minimum |  |


| Term 5 64-78 Credit Hours |  | Hours | Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| PAF 302: Public Sector Research |  | 3 | C |  |
| PAF 340: Contemporary Policy Challenges |  | 3 | C |  |
| Complete 2 courses: Concentration Course |  | 6 | C |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours |  | Hours | Minimum Grade | Notes |
| PAF 460: Public Service Ethics |  | 3 | C |  |
| Complete 2 courses: Concentration Course |  | 6 | C |  |
| Interdisciplinary Requirement |  | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| PAF 400: Senior Project |  | 3 | C |  |
| PAF 484: Internship OR Upper Division Elective |  | 3 |  |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Complete 2 courses: <br> Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| PAF 484: Internship |  | 3 | C |  |
| Upper Division Elective OR PAF 400: Senior Project |  | 3 |  |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 3 |  |  |
|  | Term hours subtotal: | 12 |  |  |

[^24]- Courses must be taken in at least two different areas.
- It is recommended that courses at the 300 and 400 level be taken in terms 5-8
- These courses should also be used to meet the university HU and SB General Studies requirement ( 15 hours combined; 6 hours in one area, 9 hours in the othes AND one course must be upper division).

| Public Policy Concentration | Area 1 | Area 2 |
| :---: | :---: | :---: |
| URB 240: Urban Policy (C) | CRJ 100: The Justice System (SB) | SWU 171: Introduction to Social Work (SB \& H) |
| PAF 470: Topics in Public Economics and Financial Management |  | SWU 250: Stress Management Tools (SB) |
| PAF 471: Public Policy Analysis |  |  |
| SWU OR CRJ OR JUS OR POL OR ECN Upper Division Elective |  |  |
| PAF 400: Senior Capstone Project |  |  |
| Public Leadership \& Management Concentration | Public Leadership \& Management Upper Division Elective | Urban Studies Upper Division Elective |
| PAF 300: Public Management and Administration | COM OR HST OR MGT OR NLM OR POS OR PSY Upper Division Elective | GCU OR GPH OR PUP OR SOC OR SOS OR URB Upper Division Elective |
| PAF 410: Building Leadership Skills (SB) |  |  |
| PAF 420: Public Leadership |  |  |
| PAF 400: Senior Capstone Project |  |  |


| Urban Studies Concentration |  | Area 3 |
| :--- | :--- | :--- |
| URB 220: Introduction to Urban America |  | NLM 160: Voluntary Action and Community <br> Leadership (SB) |
| URB 300: Urban and Metropolitan Studies |  | PRM 120: Leisure and the Quality of Life <br> (SB) |
| URB 305: Urban Governance | PRM 380: Wilderness and Parks in America <br> (SB \& H) |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011－2012 Major Map

## Social Work，BSW

College of Public Programs
Campus：Downtown Phoenix WU⿴囗十⺝刂
PPSWUSWU

| Term 1－16 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Complete 2 courses： <br> ECN 211：Macroeconomic Principles（SB）OR <br> SWU 194：Economic and Social Issues in Perspective OR <br> PGS 101：Introduction to Psychology（SB）OR <br> SOC 101：Introductory Sociology（SB）OR <br> POS 110：Government and Politics（SB）OR <br> SWU 194：AZ／National Government：Social Work Perspective OR <br> PHI 101：Introduction to Philosophy（HU）OR <br> PHI 105：Intro to Ethics（HU）OR <br> SWU 171：Introduction to Social Work（SB \＆H）OR <br> SWU 291：Social Service Delivery Systems OR <br> SWU 295：Foundations of Social Work Practice（SB \＆C）OR <br> SWU 303：Micro Human Behavior in the Social Environment（L or SB） | 6 | C | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> －ASU 101 is for ASU freshman students only and is not required for transfer students |
| ASU 101：The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students | 3 | C |  |
| MAT 142：College Mathematics（MA） | 3 |  |  |
| Interdisciplinary Requirement | 3 |  |  |
| Minimum 2．00 GPA ASU Cumulative． |  |  |  |
| Milestone：Recommended meeting with advisor to discuss human services experience requirement |  |  |  |
| Term hours subtotal： | 16 |  |  |
| Term 2 17－29 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| ECN 211：Macroeconomic Principles（SB）OR <br> SWU 194：Economic and Social Issues in Perspective OR <br> PGS 101：Introduction to Psychology（SB）OR <br> SOC 101：Introductory Sociology（SB）OR <br> POS 110：Government and Politics（SB）OR <br> SWU 194：AZ／National Government：Social Work Perspective OR <br> PHI 101：Introduction to Philosophy（HU）OR <br> PHI 105：Intro to Ethics（HU）OR <br> SWU 171：Introduction to Social Work（SB \＆H）OR <br> SWU 291：Social Service Delivery Systems OR <br> SWU 295：Foundations of Social Work Practice（SB \＆C）OR <br> SWU 303：Micro Human Behavior in the Social Environment（L or SB） | 3 | C |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students | 3 | C |  |
| Second Language：Requirement satisfied through the following： <br> ＊Completion of a language course at the intermediate level（202 or equivalent），including American Sign Language IV． | 4 |  |  |
| Lower Division Elective | 3 |  |  |
| Minimum 2．00 GPA ASU Cumulative． |  |  |  |
| Term hours subtotal： | 13 |  |  |
| Term 3 30－43 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| ECN 211：Macroeconomic Principles（SB）OR <br> SWU 194：Economic and Social Issues in Perspective OR <br> PGS 101：Introduction to Psychology（SB）OR <br> SOC 101：Introductory Sociology（SB）OR <br> POS 110：Government and Politics（SB）OR <br> SWU 194：AZ／National Government：Social Work Perspective OR <br> PHI 101：Introduction to Philosophy（HU）OR <br> PHI 105：Intro to Ethics（HU）OR <br> SWU 171：Introduction to Social Work（SB \＆H）OR <br> SWU 291：Social Service Delivery Systems OR <br> SWU 295：Foundations of Social Work Practice（SB \＆C）OR <br> SWU 303：Micro Human Behavior in the Social Environment（L or SB） | 3 | C |  |
| Literacy and Critical Inquiry（L） | 3 |  |  |


| Natural Science - Quantitative (SQ) | 4 |  |  |
| :---: | :---: | :---: | :---: |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Minimum 2.75 GPA in SWU 171, SWU 291, SWU 295, SWU 303 and SWU 310. |  |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| 1 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 44-56 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| ECN 211: Macroeconomic Principles (SB) OR <br> SWU 194: Economic and Social Issues in Perspective OR <br> PGS 101: Introduction to Psychology (SB) OR <br> SOC 101: Introductory Sociology (SB) OR <br> POS 110: Government and Politics (SB) OR <br> SWU 194: AZ/National Government: Social Work Perspective OR <br> PHI 101: Introduction to Philosophy (HU) OR <br> PHI 105: Intro to Ethics (HU) OR <br> SWU 171: Introduction to Social Work (SB \& H) OR <br> SWU 291: Social Service Delivery Systems OR <br> SWU 295: Foundations of Social Work Practice (SB \& C) OR <br> SWU 303: Micro Human Behavior in the Social Environment (L or SB) | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 |  |  |
| Interdisciplinary Requirement | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Minimum 2.75 GPA in SWU 171, SWU 291, SWU 295, SWU 303 and SWU 310. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 5-57-72 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| ECN 211: Macroeconomic Principles (SB) OR <br> SWU 194: Economic and Social Issues in Perspective OR <br> PGS 101: Introduction to Psychology (SB) OR <br> SOC 101: Introductory Sociology (SB) OR <br> POS 110: Government and Politics (SB) OR <br> SWU 194: AZ/National Government: Social Work Perspective OR <br> PHI 101: Introduction to Philosophy (HU) OR <br> PHI 105: Intro to Ethics (HU) OR <br> SWU 171: Introduction to Social Work (SB \& H) OR <br> SWU 291: Social Service Delivery Systems OR <br> SWU 295: Foundations of Social Work Practice (SB \& C) OR <br> SWU 303: Micro Human Behavior in the Social Environment (L or SB) | 3 | C |  |
| SWU 310: Social Work Practice I | 3 | C |  |
| SWU 320: Research Methods in Social Work | 3 | C |  |
| SWU 321: Statistics for Social Workers (CS) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 |  |  |
| Minimum 2.75 GPA in SWU 171, SWU 291, SWU 295, SWU 303 and SWU 310. |  |  |  |
| Milestone: Successful submission and review of: statement of educational and career goals, two approved letters of reference, and documented completion of 60 hours of human services experience |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 73-88 Credit Hours | Hours | Minimum Grade | Notes |
| SWU 340: Macro Human Behavior in the Social Environment (SB) | 3 | C |  |
| SWU 374: Diversity and Oppression in a Social Work Context (C) | 3 | C |  |
| Interdisciplinary Requirement | 3 |  |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| PHI 101: Introduction to Philosophy (HU) OR <br> PHI 105: Intro to Ethics (HU) OR <br> PHI 306: Applied Ethics (HU) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 7 89-103 Credit Hours | Hours | Minimum Grade | Notes |



Total Hours: 121
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum Cumulative GPA: 2.00 minimum Total hrs at ASU: 30 minimum Hrs Resident Credit for Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> Tourism Development \& Management, BS

College of Public Programs
Campus:Downtown Phoenix
PPTDMBS

| Term 1 0-17 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. PRM 120: Leisure and the Quality of Life (SB) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 is for ASU freshman students only and is not required for transfer students |
| ASU 101-CPP: The ASU Experience AND TDM 191: First-Year Seminar | 2 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Interdisciplinary Requirement | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Milestone: Recommend meeting with advisor to discuss career field experience requirement. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 2 18-33 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| 1. TDM 205: Introduction to Travel and Tourism (G) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 34-49 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| 4 TDM 210: Community Services and Professions | 3 | C |  |
| Interdisciplinary Requirement | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Elective | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 50-63 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 1 COM 225: Public Speaking (L) | 3 | C |  |
| Related Area Course | 3 | C |  |
| Interdisciplinary Requirement | 3 |  |  |
| Historical Awareness (H) | 3 |  |  |
| Elective | 2 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 5 64-78 Credit Hours | Hours | Minimum Grade | Notes |
| TDM 301: Sustainable Communities | 3 | C |  |



- Public Programs interdisciplinary requirement (must complete 3 courses from the following list).
- Courses must be taken in at least two different areas.
- It is recommended that courses at the 300 and 400 level be taken in terms 5-8.
- These courses should also be used to meet the university HU and SB General Studies requirement ( 15 hours combined; 6 hours in one area, 9 hours in the otheı AND one course must be upper division).
- TDM Related Area: Students must complete 6 classes ( 18 credits) from the following list.

| TDM Related Area | Area 1 | Area 2 |
| :---: | :---: | :---: |
| PRM 304: Recreation Planning and Facility | CRJ 100: The Justice System (SB) | URB 240: Urban Policy (C) |
|  |  | URB 300: Urban and Metropolitan St |
| PRM 368: Sports Management |  |  |
|  |  | PAF 410: Building Leadership Skills (SB) |
| (SB \& H) |  | PAF 411: Leadership and Change (SB) |
| PRM 470: Environmental Interpretation and Education |  |  |
| PRM 475: Entrepreneurial Recreation and Tourism |  |  |
| PRM 486: Special Events Management |  |  |
| TDM 325: Tourism Accommodations |  |  |
| TDM 345: Meeting and Convention Planning |  |  |
| TDM 386: Convention Sales and Management |  |  |
| TDM 415: Tourism Transportation Systems |  |  |
| TDM 448: Heritage and Cultural Tourism |  |  |
| PAF 410: Building Leadership Skills (SB) |  |  |
| URB 240: Urban Policy (C) |  |  |
| Area 3 |  |  |

SWU 250: Stress Management Tools (SB)

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Tourism Development \& Management (Resort and Accommodations Leadership), BS

College of Public Programs
Campus:Downtown Phoenix
PPTDMRBS

| Term 1 0-17 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 4 PRM 120: Leisure and the Quality of Life (SB) |  | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ASU 101: The ASU Experience |  | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| MAT 142: College Mathematics (MA) |  | 3 | C |  |
| TDM 191: First-Year Seminar |  | 1 | C |  |
| Interdisciplinary Requirement Course |  | 3 |  |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |
|  | Term hours subtotal: | 17 |  |  |
| Term 2 18-33 Credit Hours Critical course signified by ${ }^{\text {- }}$ |  | Hours | Minimum Grade | Notes |
| 4. TDM 205: Introduction to Travel and Tourism (G) |  | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 6 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Natural Science - Quantitative (SQ) |  | 4 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 3-49 Credit Hours Critical course signified by ${ }^{(1)}$ |  | Hours | Minimum Grade | Notes |
| 4 TDM 210: Community Services and Professions |  | 3 | C |  |
| Interdisciplinary Requirement Course |  | 3 |  |  |
| Computer/Statistics/Quantitative Applications (CS) |  | 3 |  |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Natural Science - General (SG) OR Natural Science - Quantitative (SQ) |  | 4 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 4 50-63 Credit Hours Critical course signified by ${ }^{\text {4 }}$ |  | Hours | Minimum Grade | Notes |
| 4 COM 225: Public Speaking (L) |  | 3 | C |  |
| TDM 225: Introduction to Tourism Accommodations |  | 3 | C |  |
| Historical Awareness (H) |  | 3 |  |  |
| Complete 2 courses: Elective |  | 5 |  |  |
| 4. Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 5 64-78 Credit Hours |  | Hours | Minimum Grade | Notes |
| TDM 301: Sustainable Communities |  | 3 | C |  |
| TDM 302: Inclusive Community Development (C) |  | 3 | C |  |



-     - Public Programs interdisciplinary requirement (must complete 3 courses from the following list).
- Courses must be taken in at least two different areas.
- It is recommended that courses at the 300 and 400 level be taken in terms 5-8.
- These courses should also be used to meet the university HU and SB General Studies requirement ( 15 hours combined; 6 hours in one area, 9 hours in the other AND one course must be upper division).

| Area 1 | Area 2 | Area 3 |
| :---: | :---: | :---: |
| CRJ 100: Introduction to Criminal Justice (SB) | URB 240: Urban Policy (C) | SWU 171: Introduction to Social Work (SB \& H) <br> SWU 250: Stress Management Tools (SB) |
|  | URB 300: Urban and Metropolitan Studies |  |
|  |  |  |
|  | PAF 410: Building Leadership Skills (SB) |  |
|  | PAF 411: Leadership and Change (SB) |  |
| TDM Electives: choose two courses (6): |  |  |
| TDM 345: Meeting and Convention Planning |  |  |
| TDM 386: Convention Sales and Management |  |  |
| PRM 475: Entrepreneurial Recreation and Tourism |  |  |
| LES 305: Legal, Ethical, and Regulatory Issues in Business |  |  |
| MGT 310: Collaborative Team Skills |  |  |
| MGT 380: Management and Strategy for Nonmajors |  |  |
| PAF 410: Building Leadership Skills (SB) |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum

## General University Requirements Legend

General Studies Core Requirements:

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)

| Cumulative GPA: 2.00 minimum | - Literacy and Critical Inquiry (L) | - Historical Awareness (H) |
| :--- | :--- | :--- |
| Total hrs at ASU: 30 minimum | - Mathematical Studies (MA) |  |
| Hrs Resident Credit for | - Computer/Statistics/Quantitative Applications | First-Year Composition |
| Academic Recognition: 56 minimum | (CS) |  |
| Total Community College Hrs: 64 maximum | - Humanities, Fine Arts and Design (HU) |  |
|  | - Social and Behavioral Sciences (SB) |  |
|  | - Natural Science - Quantitative (SQ) |  |
|  | - Natural Science - General (SG) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Tourism Development and Management (Sustainable Tourism),BS

College of Public Programs
Campus:Downtown Phoenix
PPTDMSBS

| Term 1 0-17 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. PRM 120: Leisure and the Quality of Life (SB) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 is for ASU freshman students only and is not required for transfer students |
| ASU 101-CPP: The ASU Experience AND TDM 191: First-Year Seminar | 2 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Interdisciplinary Requirement | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Milestone: Recommend meeting with advisor to discuss career field experience requirement. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 2 18-33 Credit Hours Critical course signified by 4 | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| 4. TDM 205: Introduction to Travel and Tourism (G) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 34-48 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| 1. TDM 210: Community Services and Professions | 3 | C |  |
| SOS 100: Introduction to Sustainability (G) | 3 |  |  |
| Interdisciplinary Requirement | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Elective | 3 |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 49-63 Credit Hours Critical course signified by 4 | Hours | Minimum Grade | Notes |
| 4 COM 225: Public Speaking (L) | 3 | C |  |
| Interdisciplinary Requirement | 3 |  |  |
| Historical Awareness (H) | 3 |  |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 |  |  |
| Elective | 2 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 64-78 Credit Hours | Hours | Minimum Grade | Notes |
| SOS 300: Advanced Concepts and Integrated Approaches in Sustainability | 3 |  |  |



- Public Programs interdisciplinary requirement (must complete 3 courses from the following list).
* Courses must be taken in at least two different areas.
* It is recommended that courses at the 300 and 400 level be taken in terms 5-8.
* These courses should also be used to meet the university HU and SB General Studies requirement ( 15 hours combined; 6 hours in one area, 9 hours in the other AND one course must be upper division).

| Interdisciplinary Requirement: Area 2 | Interdisciplinary Requirement: Area 1 | Interdisciplinary Requirement: Area 3 |
| :---: | :---: | :---: |
| URB 240: Urban Policy (C) | CRJ 100: The Justice System (SB) | SWU 171: Introduction to Social Work (SB \& H) |
| URB 300: Urban and Metropolitan Studies |  |  |
| PAF 410: Building Leadership Skills (SB) |  |  |
| PAF 411: Leadership and Change (SB) |  |  |
| TDM Concentration Electives |  |  |
| TDM 225: Introduction to Tourism Accommodations |  |  |
| TDM 415: Tourism Transportation Systems |  |  |
| TDM 482: Sustainable Revenue Management in Tourism |  |  |
| PRM 470: Environmental Interpretation and Education |  |  |
| PRM 370: Natural Resource Recreation Planning and Management |  |  |
| PRM 475: Entrepreneurial Recreation and Tourism |  |  |

## Notes:

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011－2012 Major Map Urban \＆Metropolitan Studies，BA

College of Public Programs
Campus：Downtown Phoenix WU⿴囗十⺝刂
PPURBBA

| Term 1 0－14 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MAT 142：College Mathematics（MA）OR <br> URB 220：Introduction to Urban America OR URB 240：Urban Policy（C） | 3 | C | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> －ASU 101 is for ASU freshman students only and is not required for transfer students |
| ASU 101：The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students | 3 | C |  |
| CRJ OR NLM OR PRM OR SWU course（SB） | 3 |  |  |
| Second Language：Requirement satisfied through the following：Completion of a language course at the intermediate level（202 or equivalent），including American Sign Language IV OR URB Elective | 4 |  |  |
| Minimum 2．00 GPA ASU Cumulative． |  |  |  |
| Term hours subtotal： | 14 |  |  |
| Term 2 15－30 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| MAT 142：College Mathematics（MA）OR URB 220：Introduction to Urban America OR URB 240：Urban Policy（C） | 3 | C |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students | 3 | C |  |
| Computer／Statistics／Quantitative Applications（CS） | 3 |  |  |
| Humanities，Fine Arts and Design（HU） | 3 |  |  |
| Second Language：Requirement satisfied through the following：Completion of a language course at the intermediate level（202 or equivalent），including American Sign Language IV OR URB Elective | 4 |  |  |
| Minimum 2．00 GPA ASU Cumulative． |  |  |  |
| Term hours subtotal： | 16 |  |  |
| Term 3 31－46 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| MAT 142：College Mathematics（MA）OR URB 220：Introduction to Urban America OR URB 240：Urban Policy（C） | 3 | C |  |
| CRJ OR NLM OR PRM OR SWU course（SB） | 6 |  |  |
| Literacy and Critical Inquiry（L） | 3 |  |  |
| Second Language：Requirement satisfied through the following：Completion of a language course at the intermediate level（202 or equivalent），including American Sign Language IV OR URB Elective | 4 |  |  |
| Minimum 2．00 GPA ASU Cumulative． |  |  |  |
| 1 Complete First－Year Composition requirement． |  |  |  |
| 4 Complete Mathematics（MA）requirement． |  |  |  |
| Term hours subtotal： | 16 |  |  |
| Term 4 47－62 Credit Hours Critical course signified by ${ }^{\text {！}}$ | Hours | Minimum Grade | Notes |
| URB 300：Urban and Metropolitan Studies OR URB 305：Urban Governance | 3 | C |  |
| Global Awareness（G）OR Historical Awareness（H） | 3 |  |  |
| Humanities，Fine Arts and Design（HU） | 3 |  |  |



- Public Programs interdisciplinary requirement (must complete 3 courses from the following list).
- Courses must be taken in at least two different areas.
- It is recommended that courses at the 300 and 400 level be taken in terms 5-8*.
- These courses should also be used to meet the university HU and SB General Studies requirement ( 15 hours combined; 6 hours in one area, 9 hours in the othes AND one course must be upper division).
* A minimum of 3 hours, must be taken in each: URB 484. A maximum of 6 hours of URB 484 may be taken


## -

| Area 1 | Area 2 | URB Related Area |
| :---: | :---: | :---: |
| CRJ 100: The Justice System (SB) | NLM 160: Voluntary Action and Community Leadership (SB) | AFS 366: African Archaeology: Precolonial Urban Culture (SB \& G \& H) |
|  | PRM 120: Leisure and the Quality of Life (SB) | GCU 361: Urban Geography (SB) |
|  | PRM 380: Wilderness and Parks in America (SB \& H) | HST 319: U.S. Urban History to 1850 (SB \& H) |
|  |  | HST 320: U.S. Urban History since 1850 (SB \& H) |



## Area 3

SWU 171: Introduction to Social Work (SB \& H)

SWU 250: Stress Management Tools (SB)

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum Cumulative GPA: 2.00 minimum Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011－2012 Major Map Urban \＆Metropolitan Studies，BS

College of Public Programs
Campus：Downtown Phoenix WU⿴囗⿱一一厶儿，
PPURBBS

| Term 1 0－16 Credit Hours Critical course signified by 9 |  | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| :---: | :---: | :---: | :---: | :---: |
| MAT 142：College Mathematics（MA）OR URB 220：Introduction to Urban America OR URB 240：Urban Policy（C） |  | 3 | C | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> －ASU 101 is for ASU freshman students only and is not required for transfer students |
| ASU 101：The ASU Experience |  | 1 |  |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students |  | 3 | C |  |
| Complete 2 courses： <br> Global Awareness（G）OR <br> Historical Awareness（H）OR <br> Humanities，Fine Arts and Design（HU） |  | 6 |  |  |
| Interdisciplinary Requirement Course AND Social and Behavioral Sciences（SB） |  | 3 |  |  |
|  | Term hours subtotal： | 16 |  |  |
| Term 2 17－32 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| MAT 142：College Mathematics（MA）OR URB 220：Introduction to Urban America OR URB 240：Urban Policy（C） |  | 3 | C |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students |  | 3 | C |  |
| Computer／Statistics／Quantitative Applications（CS） |  | 3 |  |  |
| Humanities，Fine Arts and Design（HU） |  | 3 |  |  |
| Natural Science－Quantitative（SQ） |  | 4 |  |  |
|  | Term hours subtotal： | 16 |  |  |
| Term 3 33－48 Credit Hours Critical course signified by 9 |  | Hours | Minimum Grade | Notes |
| MAT 142：College Mathematics（MA）OR URB 220：Introduction to Urban America OR URB 240：Urban Policy（C） |  | 3 | C |  |
| Complete 2 courses： <br> Interdisciplinary Requirement Course AND <br> Social and Behavioral Sciences（SB） |  | 6 |  |  |
| Literacy and Critical Inquiry（L） |  | 3 |  |  |
| Natural Science－Quantitative（SQ）OR <br> Natural Science－General（SG） |  | 4 |  |  |
| 4 Complete First－Year Composition requirement． |  |  |  |  |
| 4 Complete Mathematics（MA）requirement． |  |  |  |  |
|  | Term hours subtotal： | 16 |  |  |
| Term 4 49－63 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| URB 300：Urban and Metropolitan Studies OR URB 305：Urban Governance |  | 3 | C |  |
| Related Area Course |  | 6 |  |  |
| Global Awareness（G）OR <br> Historical Awareness（H）OR <br> Humanities，Fine Arts and Design（HU） |  | 3 |  |  |
| Upper Division Social and Behavioral Sciences（SB）OR Upper Division Humanities，Fine Arts and Design（HU） |  | 3 |  |  |
|  | Term hours subtotal： | 15 |  |  |
| Minimum |  |  |  |  |
| Academic Catalog Archive 2011－2012 1543 |  |  |  |  |


| Term 5 64-78 Credit Hours |  | Hours | Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| PAF 301: Applied Statistics |  | 3 |  |  |
| URB 301: Urban Research |  | 3 | C |  |
| URB 300: Urban and Metropolitan Studies OR URB 305: Urban Governance |  | 3 |  |  |
| Upper Division Related Area Course |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours |  | Hours | Minimum Grade | Notes |
| URB 302: Urban Theory |  | 3 | C |  |
| Upper Division Related Area Course |  | 3 |  |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 94-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| URB 400: Senior Professional Seminar |  | 3 | C |  |
| URB 410: Urban Leadership and Collaborative Skills |  | 3 | C |  |
| Upper Division Related Area Course |  | 6 |  |  |
| Upper Division Elective |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| URB 484: Internship |  | 3 |  |  |
| Upper Division Related Area Course |  | 3 |  |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
| Term hours subtotal: |  | 12 |  |  |
| Area 1 | Area 2 | Area 3 |  |  |
| CRJ 100: The Justice System (SB) | NLM 160: Voluntary Action and Community Leadership (SB) | SWU 171: Introduction to Social Work (SB \& H) |  |  |
|  | PRM 120: Leisure and the Quality of Life (SB) | SWU | tress Manag |  |
|  | PRM 380: Wilderness and Parks in America (SB \& H) |  |  |  |
| URB Related Area |  |  |  |  |
| AFS 366: African Archaeology: Precolonial Urban Culture (SB \& G \& H) |  |  |  |  |
| GCU 361: Urban Geography (SB) |  |  |  |  |
| HST 319: U.S. Urban History to 1850 (SB \& H) |  |  |  |  |
| HST 320: U.S. Urban History since 1850 (SB \& H) |  |  |  |  |
| HUD 201: Introduction to Housing and Urban Development |  |  |  |  |
| HUD 402: Community Revitalization: Problems and Strategies |  |  |  |  |
| PLA 101: Landscapes and Sustainability (HU \& G) |  |  |  |  |
| PLA 420: Theory of Urban Design (HU) |  |  |  |  |
| POL 453: Latin American Cities (SB \& G) |  |  |  |  |
| POS 110: Government and Politics (SB) |  |  |  |  |


| POS 220: Political Issues and Public Policy (SB) |  |  |
| :---: | :---: | :---: |
| POS 310: American National Government (SB) |  |  |
| POS 316: State and Local Government (SB) |  |  |
| POS 320: Public Administration (SB) |  |  |
| POS 325: Public Policy Development (SB) |  |  |
| POS 426: Elements of Public Policy (SB) |  |  |
| PUP 100: Introduction to Environmental Design (HU \& H \& G) |  |  |
| PUP 190: Sustainable Cities ((HU or SB) \& G) |  |  |
| PUP 200: Cities in Cinema (HU \& H \& G) |  |  |
| PUP 301: Introduction to Urban Planning (L) |  |  |
| PUP 425: Urban Housing Analysis |  |  |
| PUP 430: Transportation Planning and the Environment |  |  |
| PUP 436: City Structure and Planning |  |  |
| PUP 442: Environmental Planning |  |  |
| PUP 445: Women and Environments (C) |  |  |
| PUP 475: Environmental Impact Assessment |  |  |
| SBS 461: Program Evaluation and Policy Research |  |  |
| SOC 332: The Modern City (SB \& G) |  |  |
| SOC 333: Population (SB \& G) |  |  |
| TWC 200: Impact of Communications Technology on Society (L) |  |  |
| WST 300: Women and Gender in Contemporary Society (SB \& C) |  |  |
| URB Elective |  |  |
| PAF Elective |  |  |
| Total Hours: 120 <br> Upper Division Hours: 45 minimum <br> Major GPA: 2.00 minimum <br> Cumulative GPA: 2.00 minimum <br> Total hrs at ASU: 30 minimum <br> Hrs Resident Credit for <br> Academic Recognition: 56 minimum <br> Total Community College Hrs: 64 maximum | General University Requirements Legend <br> General Studies Core Requirements: <br> - Literacy and Critical Inquiry (L) <br> - Mathematical Studies (MA) <br> - Computer/Statistics/Quantitative Applications (CS) <br> - Humanities, Fine Arts and Design (HU) <br> - Social and Behavioral Sciences (SB) <br> - Natural Science - Quantitative (SQ) <br> - Natural Science - General (SG) | General Studies Awareness Requirements: <br> - Cultural Diversity in the U.S. (C) <br> - Global Awareness (G) <br> - Historical Awareness (H) <br> First-Year Composition |

General Studies designations listed on the major map are current for the 2011-2012 academic year

## 2011-2012 Major Map Sustainability, BA

School of Sustainability
Campus:Tempe
SUSUSTBA

| Term 1 0-14 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 AML 100: Introduction to Applied Mathematics for the Life and Social Sciences (MA) | 3 | B | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 is for ASU freshman students only and is not required for transfer students |
| 4. SOS 111: Sustainable Cities ((HU or SB) \& G) | 3 | B |  |
| ASU 101-SOS: The ASU Experience | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| 1. Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| 4. Minimum 3.00 GPA in SOS. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-30 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| MAT 170: Precalculus (MA) OR MAT 117: College Algebra (MA) | 3 | C |  |
| 4 SOS 110: Sustainable World | 3 | B |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| 4. Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| 4 Minimum 3.00 GPA in SOS. |  |  |  |
| Complete SOS 110, SOS 111 course(s). |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-47 Credit Hours Critical course signified by ${ }^{\text {! }}$ | Hours | Minimum Grade | Notes |
| 4 Upper Division Challenge Area/Track Course | 3 | C | - Students are strongly encouraged to earn a minor in an area related to their track. Those who do not complete a minor must complete 12 hours of related discipline courses, of which 3 hours must be upper division |
| MAT 170: Precalculus (MA) OR Elective | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| 1. Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| 4 Minimum 3.00 GPA in SOS. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum <br> Grade | Notes |


| Upper Division Challenge Area/Track Course | 3 | C | - 6 (out of 15 required) hours of Challenge Area/Track courses must be completed by end of term 4; one of these courses should be the student's track |
| :---: | :---: | :---: | :---: |
| Complete 2 courses: <br> Minor Course OR <br> Related Area Course | 6 | C |  |
| STP 226: Elements of Statistics (CS) | 3 |  |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV. | 4 | C |  |
| 4. Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| (1) Minimum 3.00 GPA in SOS. |  |  |  |
| 4 Milestone: Select a track. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 64-79 Credit Hours Critical course signified by ${ }^{\text {\% }}$ | Hours | Minimum Grade | Notes |
| Minor Course OR Related Area Course | 3 | C |  |
| Upper Division Challenge Area/Track Course | 6 | C |  |
| Upper Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Minimum 3.00 GPA in SOS. |  |  |  |
| Complete STP course(s). |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 80-94 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| SOS 3** Elective OR <br> SOS 4** Elective | 3 | C |  |
| Upper Division Challenge Area/Track Course | 3 | C |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| Upper Division Minor Course OR Upper Division Related Area Course | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Minimum 3.00 GPA in SOS. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 95-109 Credit Hours Critical course signified by ${ }^{\mathbf{4}}$ | Hours | Minimum Grade | Notes |
| SOS 484: Capstone: Research OR <br> SOS 484: Capstone: Internship OR <br> SOS 494: Capstone: Workshop OR <br> SOS 494: Capstone: Service Learning | 3 | B |  |
| Upper Division Minor Course OR Upper Division Elective | 3 |  |  |
| Upper Division Challenge Area/Track Course | 3 | C |  |
| Humanities, Fine Arts and Design (HU) OR Social and Behavioral Sciences (SB) | 3 |  |  |
| Upper Division Historical Awareness (H) | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Minimum 3.00 GPA in SOS. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 110-121 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| SOS 4** Elective | 3 | C |  |
| Upper Division Challenge Area/Track Elective Course | 3 | C |  |
| Upper Division Minor Course OR Upper Division Elective | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Minimum 3.00 GPA in SOS. |  |  |  |
| Term hours subtotal: | 12 |  |  |

- Please note: Students can take SOS 323 OR SOS 465.

```
Approved Challenge Area/Track Courses
SOS 320: Society and Sustainability (L or
SB)
SOS 321: Policy and Governance in
Sustainable Systems
SOS 322: International Development and
Sustainability
SOS 323: Sustainable Urban Dynamics
SOS 324: Sustainable Energy, Materials, and
Technology
SOS 325:The Economics of Sustainability
SOS 326: Sustainable Ecosystems
SOS 327: Sustainable Food and Farms
SOS 394: Sustainability and Enterprise
SOS 465: Smart Growth and New Urbanism
```


## Notes:

- ***Related Discipline:

Upon approval, it is possible that the related discipline requirement may also be satisfied by:

- Completion of a minor or a certification
- Completion of a second undergraduate degree
- Completion of an associates degree (but students must still complete at least 45 hours of upper-division credit as part of their degree requirements)

Students can explore minors or course that can be taken for their related discipline requirement at http://www.asu.edu/programs/ under the "Minors and Undergraduate Certificates" section.
**Challenge Area/ Track Elective:
A list of approved Challenge Area/ Track electives can be found online at http://schoolofsustainability.asu.edu/current-students/undergraduate/courses.php.

Total Hours: 121
Upper Division Hours: 45 minimum
Major GPA: 3.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## Hrs Resident Credit for

Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Sustainability, BS

School of Sustainability
Campus:Tempe
SUSUSTBS

| Term 1 0-13 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 AML 100: Introduction to Applied Mathematics for the Life and Social Sciences (MA) | 3 | B | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - For Math requirement: Take MAT 170: Precalculus, if this needs to be taken first |
| MAT 210: Brief Calculus (MA) OR <br> MAT 251: Calculus for Life Sciences (MA) OR <br> MAT 265: Calculus for Engineers I (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) OR <br> SOS 294: Calculus \& Probability for the Life \& Social Scien | 3-4 | B |  |
| 1 SOS 111: Sustainable Cities ((HU or SB) \& G) | 3 | B |  |
| ASU 101-SOS: The ASU Experience | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Minimum 3.00 GPA in SOS. |  |  |  |
| Term hours subtotal: | 13-14 |  |  |
| Term 2 14-29 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| MAT 210: Brief Calculus (MA) OR <br> MAT 251: Calculus for Life Sciences (MA) OR <br> MAT 265: Calculus for Engineers I (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) OR <br> SOS 294: Calculus \& Probability for the Life \& Social Scien | 3-4 | B |  |
| 4 SOS 110: Sustainable World | 3 | B |  |
| SOS 294: Introduction to Mathematical Tools and Modeling for the Life and Social Sciences | 3 | B |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of language course(s) at the 102 level. | 4 | C |  |
| ! Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Minimum 3.00 GPA in SOS. |  |  |  |
| Complete SOS 110 , SOS 111 course(s). |  |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 3 30-46 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |


| 4. Upper Division Challenge Area/Track Course | 3 | C |
| :--- | :---: | :---: |
| Minor Course OR <br> Related Discipline Course | 3 |  |
| Literacy and Critical Inquiry (L) | 3 |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 |  |
| Second Language: Requirement satisfied through the following: <br> * Completion of language course(s) at the |  |  |

- Students are strongly encouraged to earn a minor in an area related to their track. Those who do not complete a minor must complete 12 hours of related discipline courses, of which 3 hours must be upper division
(1) Minimum 2.50 GPA ASU Cumulative.


## 1. Minimum 3.00 GPA in SOS.

4 Complete First-Year Composition requirement.
Complete Mathematics (MA) requirement.


- Please note: Students can take SOS 323 OR SOS 465.
Approved Challenge Area/Track Courses
SOS 320: Society and Sustainability (L or
SB)
SOS 321: Policy and Governance in
Sustainable Systems
SOS 322: International Development and
Sustainability
SOS 323: Sustainable Urban Dynamics
SOS 324: Sustainable Energy, Materials, and
Technology
SOS 325: The Economics of Sustainability
SOS 326: Sustainable Ecosystems
SOS 327: Sustainable Food and Farms
SOS 394: Sustainability and Enterprise
SOS 465: Smart Growth and New Urbanism


## Notes:

- ***Related Discipline:

Upon approval, it is possible that the related discipline requirement may also be satisfied by:

- Completion of a minor or a certification
- Completion of a second undergraduate degree
- Completion of an associates degree (but students must still complete at least 45 hours of upper-division credit as part of their degree requirements)

Students can explore minors or course that can be taken for their related discipline requirement at http://www.asu.edu/programs/ under the "Minors and Undergraduate Certificates" section.
**Challenge Area/ Track Elective:
A list of approved Challenge Area/ Track electives can be found online at http://schoolofsustainability.asu.edu/current-students/undergraduate/courses.php.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 3.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map Early Childhood Education, BAE

Mary Lou Fulton Teachers College
Campus:Polytechnic, Tempe, West
EDECDBAE

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ECD 211: The Developing Child: Theory into Practice, Prenatal-Grade 3 (SB) OR ECD 220: Nutrition, Health, and Safety for Young Children OR TEL 212: Understanding the Culturally Diverse Child (C) OR SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in mathematics course <br> - ASU 101 or college specific equivalent First Year Seminar required of all freshman students. <br> - Recommend HST 109 for HU, H and covers U.S. Constitution for certification requirement |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| HST 109: United States to 1865 ((HU or SB) \& H) OR HST 110: United States Since 1865 (SB \& H) | 3 |  |  |
| 4 MAT 142: College Mathematics (MA) | 3 | C |  |
| ASU 101: The ASU Experience | 1 | C |  |
| TEL 111: Exploration of Education (SB) OR Elective | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-32 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| ECD 211: The Developing Child: Theory into Practice, Prenatal-Grade 3 (SB) OR ECD 220: Nutrition, Health, and Safety for Young Children OR TEL 212: Understanding the Culturally Diverse Child (C) OR SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MTE 180: Mathematics for Elementary Teachers I | 3 | C |  |
| Natural Science - Quantitative (SQ) OR Natural Science - General (SG) | 4 | C |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 33-45 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| BLE 220: Foundations of Structured English Immersion OR <br> ECD 211: The Developing Child: Theory into Practice, Prenatal-Grade 3 (SB) OR <br> ECD 220: Nutrition, Health, and Safety for Young Children OR <br> TEL 212: Understanding the Culturally Diverse Child (C) OR <br> SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| 4 MTE 181: Mathematics for Elementary Teachers II | 3 | C |  |
| 4 Natural Science - Quantitative (SQ) | 4 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Milestone: Intent to Progress Online Form. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 4 46-59 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> BLE 220: Foundations of Structured English Immersion OR <br> ECD 211: The Developing Child: Theory into Practice, Prenatal-Grade 3 (SB) OR ECD 220: Nutrition, Health, and Safety for Young Children OR <br> TEL 212: Understanding the Culturally Diverse Child (C) OR <br> SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 5 | C |  |
| EDT 180: Computer Literacy (CS) OR EDT 321: Computer Literacy (CS) | 3 | C |  |



Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:
General Studies Awareness Requirements:

- Literacy and Critical Inquiry (L)
- Cultural Diversity in the U.S. (C)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## 2011-2012 Major Map Elementary Education, BAE

Mary Lou Fulton Teachers College Campus:Polytechnic, Tempe, West TEEEDBAE

| Term 1 0-13 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students <br> - Recommend HST 109 for HU, H and covers U.S. Consititution for certification requirement |
| 4 MAT 142: College Mathematics (MA) | 3 | C |  |
| HST 109: United States to 1865 ((HU or SB) \& H) OR HST 110: United States Since 1865 (SB \& H) | 3 | C |  |
| ASU 101: The ASU Experience | 1 | C |  |
| Elective | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13 |  |  |


| Term 2 14-29 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Natural Science - Quantitative (SQ) OR Natural Science - General (SG) | 4 | C |  |
| 4 MTE 180: Mathematics for Elementary Teachers I | 3 | C |  |
| TEL 212: Understanding the Culturally Diverse Child (C) OR SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| Elective | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 30-44 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| EDT 180: Computer Literacy (CS) OR EDT 321: Computer Literacy (CS) | 3 | C |  |
| 4 MTE 181: Mathematics for Elementary Teachers II | 3 | C |  |
| TEL 212: Understanding the Culturally Diverse Child (C) OR <br> SPE 222: Orientation to Education of Exceptional Children (SB \& C) OR <br> BLE 220: Foundations of Structured English Immersion OR <br> RDG 334: Children'sLiterature and Elementary School Curriculum (HU) | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) OR Social and Behavioral Sciences (SB) | 3 |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Milestone: Intent to Progress Online Form. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 45-60 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Minimum Grade | Notes |
| TEL 212: Understanding the Culturally Diverse Child (C) OR <br> SPE 222: Orientation to Education of Exceptional Children (SB \& C) OR <br> BLE 220: Foundations of Structured English Immersion OR <br> RDG 334: Children'sLiterature and Elementary School Curriculum (HU) | 6 | C |  |
| 4 Natural Science - Quantitative (SQ) | 4 | C |  |
| Global Awareness (G) | 3 |  |  |

Minimum 2.50 GPA ASU Cumulative.
Milestone: Must complete at least 60 credits to progress into PTPP.
Milestone: Attend PTPP Enrollment Workshop.
Milestone: DPS Fingerprint Clearance Card.
Term hours subtotal: 16

| Term 5 61-76 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| TEL 311: Instruction and Management in the Inclusive Classroom |  | 3 | C |  |
| TEL 313: Educational Technology in the K-12 Curriculum |  | 3 | C |  |
| TEL 314: Classroom Assessment |  | 3 | C |  |
| TEL 315: Child and Adolescent Development (L or SB) |  | 3 | C |  |
| EED 433: Language Method Management and Assessment |  | 3 | C |  |
| EED 396: Field Experience I |  | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 6 77-92 Credit Hours |  | Hours | Minimum Grade | Notes |
| SPF 301: Culture and Schooling (L) |  | 3 | C |  |
| EDP 311: Educational Psychology for Future Teachers (SB) |  | 3 | C |  |
| RDG 322: Language Literacy 1 in Elementary Schools |  | 3 | C |  |
| EED 324: Social Studies in Elementary Schools |  | 3 | C |  |
| EED 397: Field Experience II |  | 1 | Y |  |
| Elective |  | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 7 93-105 Credit Hours |  | Hours | Minimum Grade | Notes |
| EED 411: Science in Elementary Schools |  | 3 | C |  |
| EED 412: Mathematics in Elementary Schools |  | 3 | C |  |
| RDG 413: Language Literacy 2 in Elementary Schools |  | 3 | C |  |
| EED 478: Student Teaching in the Elementary School |  | 4 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 13 |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| EED 478: Student Teaching in the Elementary School |  | 9 | Y |  |
| SPE 416: Quality Practices in the Collaborative Classroom |  | 3 | C |  |
| BLE 408: SEI for Linguistically Diverse Learners |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum Cumulative GPA: 2.00 minimum Total hrs at ASU: 30 minimum Hrs Resident Credit for Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map

## Elementary Education (Diversity in Language and Learning),BAE

Mary Lou Fulton Teachers College
Campus:Polytechnic, Tempe, West
TEDLLBAE


| Term 2 14-29 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MTE 180: Mathematics for Elementary Teachers I | 3 | C |  |
| Natural Science - Quantitative (SQ) OR Natural Science - General (SG) | 4 | C |  |
| RDG 334: Children'sLiterature and Elementary School Curriculum (HU) OR SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 30-45 Credit Hours Critical course signified by ${ }^{\text {e }}$ | Hours | Minimum Grade | Notes |
| EDT 180: Computer Literacy (CS) OR EDT 321: Computer Literacy (CS) | 3 | C |  |
| 4 MTE 181: Mathematics for Elementary Teachers II | 3 | C |  |
| 4 Natural Science - Quantitative (SQ) | 4 | C |  |
| RDG 334: Children'sLiterature and Elementary School Curriculum (HU) OR SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| Second Language | 3-4 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Milestone: Submit intent to progress form (online) |  |  |  |
| 4. Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 4 46-60 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |


| 1. BLE 220: Foundations of Structured English Immersion | 3 |  |
| :--- | :---: | :---: |
| Global Awareness (G) | 3 |  |
| Literacy and Critical Inquiry (L) | 3 | C |
| Second Language | $3-4$ |  |
| Elective | 3 |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |


| Milestone: Must complete at least 60 credits to progress into PTPP. |
| :--- |
| Milestone: Attend PTPP Enrollment Workshop. |
| Milestone: DPS Fingerprint Clearance Card. |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 4 1 ARIZONA STATE UNIVERSITY

## 2011-2012 Major Map Secondary Education (Biological Sciences), BAE

Mary Lou Fulton Teachers College
Campus:Polytechnic, Tempe, West
tebiobae

| Term 1 0-15 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 BIO 181: General Biology I (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MAT 170: Precalculus (MA) | 3 | C | - ASU Math Placement Exam |
| ASU 101: The ASU Experience | 1 | C | score determines placement in |
| CHM 113: General Chemistry I (SQ) | 4 | C | hematics course |
| Term hours subtotal: | 15 |  | - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |


| Term 2 16-32 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 BIO 182: General Biology II (SG) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| EDT 180: Computer Literacy (CS) OR EDT 321: Computer Literacy (CS) | 3 | C |  |
| 1 SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| CHM 116: General Chemistry II (SQ) | 4 | C |  |
| Term hours subtotal: | 17 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| BIO 360: Animal Physiology OR PLB 308: Plant Physiology | 4-3 | C |  |
| 4 BIO 320: Fundamentals of Ecology | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  |  |
| HST 109: United States to 1865 ((HU or SB) \& H) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 | C |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| 4. Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| 1. Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Milestone: Intent to Progress Online Form. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16-15 |  |  |
| Term 4 49-65 Credit Hours Critical course signified by ${ }^{\text {+ }}$ | Hours | Minimum Grade | Notes |
| 1 BIO 345: Organic Evolution | 3 | C |  |
| 4 BLE 220: Foundations of Structured English Immersion | 3 | C |  |
| MIC 205: Microbiology (SG) AND <br> MIC 206: Microbiology Laboratory (SG) OR <br> MIC 220: Biology of Microorganisms AND <br> MIC 206: Microbiology Laboratory (SG) OR <br> BIO 353: Cell Biology AND <br> BIO 354: Cell Biology Laboratory | 4 | C |  |


| Upper Division Social and Behavioral Sciences (SB) |  | 3 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| PHY 101: Introduction to Physics (SQ) |  | 4 | C |  |
| 4. Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |  |
| Milestone: Must complete at least 60 credits to progress into PTPP. |  |  |  |  |
| Milestone: Attend PTPP Enrollment Workshop. |  |  |  |  |
| Milestone: DPS Fingerprint Clearance Card. |  |  |  |  |
|  | Term hours subtotal: | 17 |  |  |
| Term 5 66-78 Credit Hours |  | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| TEL 311: Instruction and Management in the Inclusive Classroom |  | 3 | C |  |
| TEL 313: Educational Technology in the K-12 Curriculum |  | 3 | C |  |
| TEL 314: Classroom Assessment |  | 3 | C |  |
| TEL 315: Child and Adolescent Development (L or SB) |  | 3 | C |  |
| SED 396: Field Experience I |  | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 13 |  |  |
| Term 6 79-95 Credit Hours |  | Hours | Minimum Grade | Notes |
| BIO 340: General Genetics OR <br> LSC 347: Fundamentals of Genetics AND <br> LSC 348: Fundamentals of Genetics Laboratory |  | 4 | C |  |
| BLE 407: SEI for Secondary Students |  | 3 | C |  |
| SPE 417: Inclusion Practices at the Secondary Level |  | 3 | C |  |
| RDG 323: Literacy Processes in Content Areas |  | 3 | C |  |
| BIO 480: Methods of Teaching Biology OR <br> SED 482: Science Teaching Methods for Secondary Schools |  | 3 | C |  |
| SED 397: Field Experience II |  | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 17 |  |  |
| Term 7 96-112 Credit Hours |  | Hours | Minimum Grade | Notes |
| BIO 370: Vertebrate Zoology OR <br> BIO 385: Comparative Invertebrate Zoology OR <br> MIC 443: The Microbial Universe AND <br> MIC 444: The Microbial Universe Laboratory OR <br> PLB 300: Comparative Plant Diversity (L or SG) OR PLB 310: The Flora of Arizona |  | 4 | C |  |
| BIO 482: Advanced Methods of Teaching Biology |  | 3 | C |  |
| BIO Upper Division Elective |  | 3 | C |  |
| SED 321: Critical Issues in Secondary Education (L) |  | 3 | C |  |
| SED 322: Classroom Leadership in Secondary Schools |  | 3 | C |  |
| SED 496: Field Experience III |  | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 17 |  |  |
| Term 8 113-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| SED 478: Student Teaching in the Secondary School |  | 8-12 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 8-12 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)

| Total hrs at ASU: 30 minimum | - Mathematical Studies (MA) | - Historical Awareness (H) |
| :--- | :--- | :--- |
| Hrs Resident Credit for | - Computer/Statistics/Quantitative Applications |  |
| Academic Recognition: 56 minimum | (CS) | First-Year Composition |
| Total Community College Hrs: 64 maximum | - Humanities, Fine Arts and Design (HU) |  |
|  | - Social and Behavioral Sciences (SB) |  |
|  | - Natural Science - Quantitative (SQ) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Secondary Education (Business), BAE

Mary Lou Fulton Teachers College
Campus:Polytechnic, Tempe, West
EDBUSBAE

| Term 1 0-17 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C | - ASU 101 is for ASU freshman students only. Not required of transfer students <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - Recommend HST 109 for HU, H and covers U.S. constitution for certification requirement. |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MAT 210: Brief Calculus (MA) | 3 | C |  |
| Natural Science - Quantitative (SQ) OR Natural Science - General (SG) | 4 | C |  |
| ASU 101: The ASU Experience | 1 | C |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 2 18-32 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| CIS 105: Computer Applications and Information Technology (CS) | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| MAT 211: Mathematics for Business Analysis | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 33-46 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| 4 ACC 231: Uses of Accounting Information I | 3 | C |  |
| 1 ECN 221: Business Statistics (CS) | 3 | C |  |
| 1 ) Natural Science - Quantitative (SQ) | 4 | C |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  |  |
| Typing Course | 1 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Milestone: Intent to Progress Online Form. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 4 47-61 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| 1. ACC 241: Uses of Accounting Information II | 3 | C |  |
| 1. BLE 220: Foundations of Structured English Immersion | 3 | C |  |
| FIN 300: Fundamentals of Finance OR <br> FIN 380: Personal Financial Management | 3 | C |  |
| LES 305: Legal, Ethical, and Regulatory Issues in Business | 3 | C |  |

Minimum 2.50 GPA ASU Cumulative.
Maintain 2.50 GPA in Critical Tracking Courses.
Milestone: Must complete at least 60 credits to progress into PTPP.
Milestone: Attend PTPP Enrollment Workshop.
Milestone: DPS Fingerprint Clearance Card.
Term hours subtotal:
15

| Term 5 62-77 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| SCM 300: Global Supply Operations | 3 | C |  |
| TEL 311: Instruction and Management in the Inclusive Classroom | 3 | C |  |
| TEL 313: Educational Technology in the K-12 Curriculum | 3 | C |  |
| TEL 314: Classroom Assessment | 3 | C |  |
| TEL 315: Child and Adolescent Development (L or SB) | 3 | C |  |
| SED 396: Field Experience I | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
|  | 16 |  |  |


| Term 6 $78-96$ Credit Hours | Hours | Minimum <br> Grade |
| :--- | :--- | :--- |
| MGT 300: Organization and Management Leadership | 3 | C |
| MKT 300: Marketing and Business Performance | 3 | C |
| BLE 407: SEI for Secondary Students | 3 | C |
| SPE 417: Inclusion Practices at the Secondary Level | 3 | C |
| RDG 323: Literacy Processes in Content Areas | 3 | C |
| BUE 480: Teaching Business Subjects |  | 3 |
| SED 397: Field Experience II | Term hours subtotal: | 19 |
| Minimum 2.50 GPA ASU Cumulative. | 19 | C |


| Term 7 97-112 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| MKT 391: Essentials of Selling OR MKT 420: Retail Management |  | 3 | C |  |
| MGT 440: Entrepreneurship |  | 3 | C |  |
| SED 321: Critical Issues in Secondary Education (L) |  | 3 | C |  |
| SED 322: Classroom Leadership in Secondary Schools |  | 3 | C |  |
| BUE 481: Technology in Business and Vocational Education |  | 3 | C |  |
| SED 496: Field Experience III |  | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 8 113-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| SED 478: Student Teaching in the Secondary School |  | 8-12 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Secondary Education (Chemistry), BAE

Mary Lou Fulton Teachers College
Campus:Polytechnic, Tempe, West
TECHMBAE

| Term 1 0-18 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. CHM 113: General Chemistry I (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 6 | C |  |
| ASU 101: The ASU Experience | 1 | C |  |
| MAT 270: Calculus with Analytic Geometry I (MA) | 4 | C |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 18 |  |  |
| Term 2 19-38 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| 1. CHM 116: General Chemistry II (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 6 | C |  |
| 4 SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| MAT 271: Calculus with Analytic Geometry II (MA) | 4 | C |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 20 |  |  |
| Term 3 39-55 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| CHM 233: General Organic Chemistry I AND CHM 237: General Organic Chemistry Laboratory I | 4 | C |  |
| EDT 180: Computer Literacy (CS) OR EDT 321: Computer Literacy (CS) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) OR Social and Behavioral Sciences (SB) | 3 |  |  |
| PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) | 4 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| 4. Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| 4. Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |

Milestone: Submit intent to progress form (online)
Term hours subtotal: 17

| Term 4 | $56-70$ Credit Hours Critical course signified by | Hours |
| :--- | :---: | :---: |
| BLE 220: Foundations of Structured English Immersion | 3 | Minimum <br> Grade |
| CHM 234: General Organic Chemistry II AND | C |  |
| CHM 238: General Organic Chemistry Laboratory I | 4 | C |
| PHY 112: General Physics (SQ) AND |  |  |
| PHY 114: General Physics Laboratory (SQ) | 4 | C |

$\qquad$
Minimum 2.50 GPA ASU Cumulative.
Maintain 2.50 GPA in Critical Tracking Courses.
Milestone: Must complete at least 60 credits to progress into PTPP.
Milestone: Attend PTPP Enrollment Workshop.
Milestone: DPS Fingerprint Clearance Card.
Term hours subtotal: 15

| Term 5 71-86 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| CHM 341: Elementary Physical Chemistry OR CHM 345: Physical Chemistry I AND CHM 346: Physical Chemistry II |  | 3-4 | C |  |
| TEL 311: Instruction and Management in the Inclusive Classroom |  | 3 | C |  |
| TEL 313: Educational Technology in the K-12 Curriculum |  | 3 | C |  |
| TEL 314: Classroom Assessment |  | 3 | C |  |
| TEL 315: Child and Adolescent Development (L or SB) |  | 3 | C |  |
| SED 396: Field Experience I |  | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16-17 |  |  |
| Term 6 87-102 Credit Hours |  | Hours | Minimum Grade | Notes |
| BCH 361: Principles of Biochemistry OR CHM 302: Environmental Chemistry OR CHM 453: Inorganic Chemistry |  | 3 | C |  |
| BLE 407: SEI for Secondary Students |  | 3 | C |  |
| SPE 417: Inclusion Practices at the Secondary Level |  | 3 | C |  |
| RDG 323: Literacy Processes in Content Areas |  | 3 |  |  |
| CHM 480: Methods of Teaching Chemistry |  | 3 | C |  |
| SED 397: Field Experience II |  | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 7 103-112 Credit Hours |  | Hours | Minimum Grade | Notes |
| BCH 361: Principles of Biochemistry OR CHM 302: Environmental Chemistry OR CHM 453: Inorganic Chemistry |  | 3 | C |  |
| SED 321: Critical Issues in Secondary Education (L) |  | 3 |  |  |
| SED 322: Classroom Leadership in Secondary Schools |  | 3 |  |  |
| SED 496: Field Experience III |  | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 10 |  |  |
| Term 8 113-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| SED 478: Student Teaching in the Secondary School |  | 8-12 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 8-12 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)


## 2011-2012 Major Map Secondary Education (Earth \& Space Sciences), BAE

Mary Lou Fulton Teachers College
Campus:Polytechnic, Tempe, West
EDESSBAE

| Term 1 0-16 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. CHM 113: General Chemistry I (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| GLG 101: Introduction to Geology I (Physical) (SQ \& G) AND GLG 103: Introduction to Geology I-Laboratory (SQ) | 4 | C | - ASU Math Placement Exam score determines placement in Mathematics course |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| 4 SES 111: Exploration of Science Teaching | 1 | C | - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| ASU 101: The ASU Experience | 1 | C |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 2 17-34 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| AST 111: Introduction to Solar Systems Astronomy (SQ) AND AST 113: Astronomy Laboratory I (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| GLG 102: Introduction to Geology II (Historical) (SG \& H) AND <br> GLG 104: Introduction to Geology II-Laboratory (SG) OR <br> GLG 106: Habitable Worlds (SQ) OR <br> GLG 108: Water Planet OR <br> GLG 110: Geologic Disasters and the Environment (SG \& G) AND <br> GLG 111: Geologic Disasters Laboratory (SG) | 4 | C |  |
| PHY 101: Introduction to Physics (SQ) OR <br> PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) | 4 | C |  |
| 4 SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| Term hours subtotal: | 18 |  |  |
| Term 3 35-51 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |

AST 112: Introduction to Stars, Galaxies, and Cosmology (SQ) AND
AST 114: Astronomy Laboratory II (SQ) OR
GLG 102: Introduction to Geology II (Historical) (SG \& H) AND
GLG 104: Introduction to Geology II-Laboratory (SG) OR 4
GLG 106: Habitable Worlds (SQ) OR
GLG 108: Water Planet OR
GLG 110: Geologic Disasters and the Environment (SG \& G) AND
GLG 111: Geologic Disasters Laboratory (SG)
EDT 180: Computer Literacy (CS) OR $\quad 3 \quad$ C
EDT 321: Computer Literacy (CS)
C

GLG 398: Earth Science in Arizona 4
GLG 305: Dynamic Earth OR $\quad 3 \quad$ C
GLG 310: Structural Geology
3
Minimum 2.50 GPA ASU Cumulative.
1 Maintain 2.50 GPA in Critical Tracking Courses.
4 Complete Mathematics (MA) requirement.
Complete First-Year Composition requirement.
Milestone: Intent to Progress Online Form.

| Term 4 52-64 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 BLE 220: Foundations of Structured English Immersion | 3 | C |  |
| AST 321: Introduction to Planetary and Stellar Astrophysics (SQ) OR <br> AST 322: Introduction to Galactic and Extragalactic Astrophysics (SQ) OR <br> GLG 325: Oceanography OR <br> GLG 327: Earth's Critical Zone OR <br> GPH 212: Introduction to Meteorology (SQ) OR <br> GPH 213: Introduction to Climatology (SG) OR <br> SES 311: Essentials of Astrobiology: Exploration for Life in the Universe | 3 | C |  |
| GLG 321: Mineralogy | 4 | C |  |
| HST 109: United States to 1865 ((HU or SB) \& H) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| 4. Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| 4 Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Milestone: Must complete at least 60 credits to progress into PTPP. |  |  |  |
| Milestone: Attend PTPP Enrollment Workshop. |  |  |  |
| Milestone: DPS Fingerprint Clearance Card. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 5 65-80 Credit Hours | Hours | Minimum Grade | Notes |
| AST 321: Introduction to Planetary and Stellar Astrophysics (SQ) OR <br> AST 322: Introduction to Galactic and Extragalactic Astrophysics (SQ) OR <br> GLG 325: Oceanography OR <br> GLG 327: Earth's Critical Zone OR <br> GPH 212: Introduction to Meteorology (SQ) OR <br> GPH 213: Introduction to Climatology (SG) OR <br> SES 311: Essentials of Astrobiology: Exploration for Life in the Universe | 3 | C |  |
| SED 396: Field Experience I | 1 | Y |  |
| TEL 311: Instruction and Management in the Inclusive Classroom | 3 | C |  |
| TEL 313: Educational Technology in the K-12 Curriculum | 3 | C |  |
| TEL 314: Classroom Assessment | 3 | C |  |
| TEL 315: Child and Adolescent Development (L or SB) | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 81-96 Credit Hours | Hours | Minimum Grade | Notes |

AST 321: Introduction to Planetary and Stellar Astrophysics (SQ) OR
AST 322: Introduction to Galactic and Extragalactic Astrophysics (SQ) OR
GLG 325: Oceanography OR
GLG 327: Earth's Critical Zone OR 3
GPH 212: Introduction to Meteorology (SQ) OR
GPH 213: Introduction to Climatology (SG) OR
SES 311: Essentials of Astrobiology: Exploration for Life in the Universe

| GLG 451: Field Geology I (L) | 3 |
| :--- | :---: |
| BLE 407: SEI for Secondary Students | 3 |
| RDG 323: Literacy Processes in Content Areas | 3 |
| SED 397: Field Experience II | 1 |
| SPE 417: Inclusion Practices at the Secondary Level | 3 |

Term hours subtotal: 16

| Term 7 $97-109$ Credit Hours | Hours | Minimum <br> Grade |
| :--- | :--- | :---: |
| GLG 490: Teaching Earth and Space Sciences | 3 | C |
| SED 321: Critical Issues in Secondary Education (L) | 3 |  |
| SED 322: Classroom Leadership in Secondary Schools | 3 | C |
| SED 496: Field Experience III | 1 | Y |
| Upper Division Social and Behavioral Sciences (SB) | Term hours subtotal: | 13 |
| Minimum 2.50 GPA ASU Cumulative. |  |  |
|  |  |  |


| Term 8 | $110-120$ Credit Hours | Hours | Grade |
| :---: | :---: | :---: | :---: |
| SED 478: Student Teaching in the Secondary School | 11 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |

Term hours subtotal:
11

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4 UNIVERSITY

## 2011-2012 Major Map

## Secondary Education (Economics), BAE

Mary Lou Fulton Teachers College
Campus:Polytechnic, Tempe, West
EDECNBAE

| Term 1-16 Credit Hours Critical course signified by | Hours | Minimum Grade |
| :---: | :---: | :---: |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |
| MAT 210: Brief Calculus (MA) | 3 | C |
| ASU 101: The ASU Experience | 1 | C |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  |
| Term hours subtotal: | 16 |  |

- ASU 101 is for ASU freshman students only. Not required of transfer students
- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determins placement in Mathematics course
- Recommend HST 109 for HU, H and covers US constitution for certification requirement

| Term 2 17-32 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| 4 SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| 4 MAT 211: Mathematics for Business Analysis | 3 | C |  |
| Natural Science - Quantitative (SQ) OR Natural Science - General (SG) | 4 | C |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by 4 | Hours | Minimum Grade | Notes |
| ECN 313: Intermediate Macroeconomic Theory (SB) OR ECN 314: Course not found | 3 | C |  |
| STP 226: Elements of Statistics (CS) OR ECN 231: Honors Business Statistics (CS) | 3 | C |  |
| 4 Natural Science - Quantitative (SQ) | 4 |  |  |
| ECN Upper Division Elective | 3 | C |  |
| Related Area Courses | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Milestone: Intent to Progress Online Form. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 49-63 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| ECN 313: Intermediate Macroeconomic Theory (SB) OR ECN 314: Intermediate Microeconomic Theory (SB) | 3 | C |  |
| 4 BLE 220: Foundations of Structured English Immersion | 3 | C |  |
| ECN 231: Honors Business Statistics (CS) OR ECN 410: Applied Business Forecasting OR ECN 425: Introduction to Econometrics | 3 | C |  |
| ECN Upper Division Elective | 3 | C |  |
| Related Area Courses | 3 | C |  |



| MKT Upper Division Elective | FLA 479: Introduction to Teaching Foreign Languages | FLA 480: Methods of Teaching Foreign Languages |
| :---: | :---: | :---: |
| PHI Upper Division Elective |  |  |
| POS Upper Division Elective | HST 480: Methods of Teaching History: Classroom Resources | HST 481: Methods of Teaching History: Community Resources |
| SCM Upper Division Elective | MTE 482: Methods of Teaching Mathematics in Secondary School | MTE 494: Methods of Teaching Math in Secondary Schools |
| STP Upper Division Elective | PHY 480: Methods of Teaching Physics | PHY 484: Internship |
|  | SED 480: Special Methods of Teaching Social Studies | SED 480: Special Methods of Teaching Social Studies |
|  | GLG 490: Methods in Geoscience Teaching |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4 UNIVERSITY

## 2011-2012 Major Map Secondary Education (English), BAE

Mary Lou Fulton Teachers College
Campus:Polytechnic, Tempe, West
TEENGBAE

| Term 1 0-17 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses |
| EDT 180: Computer Literacy (CS) OR EDT 321: Computer Literacy (CS) |  | 3 |  |  |
| 4 MAT 142: College Mathematics (MA) |  | 3 | C | - ASU Math Placement Exam score determines placement in Mathematics course |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) |  | 4 | C |  |
| ASU 101: The ASU Experience |  | 1 | C | - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| Global Awareness (G) |  | 3 | C |  |
|  | Term hours subtotal: | 17 |  |  |


| Term 2 18-33 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. BLE 220: Foundations of Structured English Immersion | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 1 Natural Science - Quantitative (SQ) | 4 | C |  |
| 4. SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 34-48 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 1 ENG 200: Critical Reading and Writing About Literature (L or HU) | 3 | C |  |
| 1. ENG Elective | 3 | C |  |
| ENG 221: Survey of English Literature (HU) | 3 | C |  |
| ENG 212: English Prose Style (L) OR <br> ENG 215: Strategies of Academic Writing (L) OR <br> ENG 216: Persuasive Writing on Public Issues (L) OR <br> ENG 217: Writing Reflective Essays (L) OR <br> ENG 311: Persuasive Writing (L) | 3 | C |  |
| Elective | 3 |  |  |
| 9. Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| 9. Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Milestone: Submit intent to progress form (online) |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 49-63 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 222: Survey of English Literature (HU \& H) | 3 | C |  |
| ENG Elective | 3 | C |  |
| ENG 241: Literatures of the United States to 1860 (HU) | 3 | C |  |

ENG 333: American Ethnic Literature ((L or HU) \& C) OR
ENG 353: African American Literature: Beginnings through the Harlem Renaissance ((L or HU ) \& C) OR
ENG 354: African American Literature: Harlem Renaissance to the Present ((L or HU) \& C) OR

ENG 359: American Indian Literature ((L or HU) \& C) OR
3 C
ENG 363: Transborder Mexican and Chicano/a Literature of Southwest North America
( L or HU) \& C) OR
ENG 364: Women and Literature (HU) OR
ENG 461: Women and Literature
Minimum 2.50 GPA ASU Cumulative.

1. Maintain 2.50 GPA in Critical Tracking Courses.
Milestone: Attend PTPP Enrollment Workshop.
Milestone: Must complete at least 60 credits to progress into PTPP.

Milestone: DPS Fingerprint Clearance Card.
Term hours subtotal: 15

| Term 5 64-79 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 242: Literatures of the United States, 1860 to Present (HU) | 3 | C |  |
| TEL 311: Instruction and Management in the Inclusive Classroom | 3 | C |  |
| TEL 313: Educational Technology in the K-12 Curriculum | 3 | C |  |
| TEL 314: Classroom Assessment | 3 | C |  |
| TEL 315: Child and Adolescent Development (L or SB) | 3 | C |  |
| SED 396: Field Experience I | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 80-95 Credit Hours | Hours | Minimum Grade | Notes |
| ENG Upper Division Elective | 3 | C |  |
| ENG 480: Methods of Teaching English: Composition (L) OR SED 481: English Teaching Methods for Secondary Schools | 3 | C |  |
| BLE 407: SEI for Secondary Students | 3 | C |  |
| SPE 417: Inclusion Practices at the Secondary Level | 3 | C |  |
| RDG 323: Literacy Processes in Content Areas | 3 | C |  |
| SED 397: Field Experience II | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 7 96-111 Credit Hours | Hours | Minimum Grade | Notes |


| ENG 422: Studies in Shakespeare (HU) | 3 | C |
| :--- | :--- | :--- |
| ENG 471: Literature for Young Adults (HU) | 3 | C |
| ENG 482: Methods of Teaching English: Language (L) | 3 | C |
| SED 321: Critical Issues in Secondary Education (L) | 3 | C |
| SED 322: Classroom Leadership in Secondary Schools | 3 | C |
| SED 496: Field Experience III | 1 | Y |


| Minimum 2.50 GPA ASU Cumulative. |  |  |
| :--- | :--- | :--- |
|  | Term hours subtotal: | 16 |


| Term 8 | $112-120$ Credit Hours | Hours | Minimum <br> Grade |
| :--- | :--- | :---: | :---: | :---: |
| SED 478: Student Teaching in the Secondary School | 9 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
|  | Term hours subtotal: | 9 |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Secondary Education (French), BAE

Mary Lou Fulton Teachers College
Campus:Polytechnic, Tempe, West
EDFREBAE


| Term 3 33-47 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| (1) BLE 220: Foundations of Structured English Immersion | 3 | C |  |
| EDT 180: Computer Literacy (CS) OR EDT 321: Computer Literacy (CS) | 3 |  |  |
| 1 FRE 312: French Composition (G) | 3 | C |  |
| FRE 321: French Literature ((L or HU ) \& H) | 3 | C |  |
| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 |  |  |
| - Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| 4. Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Milestone: Intent to Progress Online Form. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Minimum Grade | Notes |

Natural Science - General (SG) OR
Natural Science - Quantitative (SQ)
FRE 322: French Literature (L or HU) $\quad 3 \quad$ C

FRE 415: French Civilization I (HU) OR
FRE 416: French Civilization II (HU \& G) OR
FRE 471: The Literature of Francophone Africa and the Caribbean (L or HU) OR 3
FRE 472: Franco-Canadian Civilization OR
FRE 394: Special Topics
FRE 441: French Literature of the 17th Century (HU) OR
FRE 442: French Literature of the 17th Century (HU \& H) OR
FRE 445: French Literature of the 18th Century (L or HU) OR

| FRE 451: French Poetry of the 19th Century OR <br> FRE 452: French Novel of the 19th Century (HU) OR <br> FRE 453: Theater of the 19th Century (L or HU) OR <br> FRE 461: Modern Narrative (HU) OR <br> FRE 462: Modern Poetry (HU) | 3 | C |  |
| :---: | :---: | :---: | :---: |
| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 | C |  |
| 1. Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| (7) Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Milestone: Attend PTPP Enrollment Workshop. |  |  |  |
| Milestone: Must complete at least 60 credits to progress into PTPP. |  |  |  |
| Milestone: DPS Fingerprint Clearance Card. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 64-82 Credit Hours | Hours | Minimum Grade | Notes |
| FRE 315: French Phonetics | 3 | C |  |
| TEL 311: Instruction and Management in the Inclusive Classroom | 3 | C |  |
| TEL 313: Educational Technology in the K-12 Curriculum | 3 | C |  |
| TEL 314: Classroom Assessment | 3 | C |  |
| TEL 315: Child and Adolescent Development (L or SB) | 3 | C |  |
| SLC 479: Introduction to Teaching Foreign Languages | 3 | C |  |
| SED 396: Field Experience I | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 19 |  |  |
| Term 6 83-98 Credit Hours | Hours | Minimum Grade | Notes |
| BLE 407: SEI for Secondary Students | 3 | C |  |
| SPE 417: Inclusion Practices at the Secondary Level | 3 | C |  |
| RDG 323: Literacy Processes in Content Areas | 3 | C |  |
| SLC 480: Methods of Teaching Foreign Languages | 3 | C |  |
| SED 397: Field Experience II | 1 | Y |  |
| SLC 498: Ancient World on Film, Art and Culture of 19th century, Border and Global Narratives, Film, Literature in Leon\&Barcelona, Spain, Hispanic World: A Cultural and Literary Overview, Issues in Syntax, Language and Learning Technology, Paris and Florence in the Middle Ages (1100-1500), Pro-Seminar, Society and Culture in Modern Europe, Stalinism in European Literature and Film | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 7 99-111 Credit Hours | Hours | Minimum Grade | Notes |
| FRE 412: Advanced Written French (G) | 3 | C |  |
| SED 321: Critical Issues in Secondary Education (L) | 3 | C |  |
| SED 322: Classroom Leadership in Secondary Schools | 3 | C |  |
| FRE 411: Advanced Spoken French (G) | 3 | C |  |
| SED 496: Field Experience III | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 8 112-120 Credit Hours | Hours | Minimum Grade | Notes |
| SED 478: Student Teaching in the Secondary School | 9-12 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |

Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)
- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Secondary Education (Geography), BAE

Mary Lou Fulton Teachers College
Campus:Polytechnic, Tempe, West
EDGCUBAE

| Term 1 0-17 Credit Hours Critical course signified by | Hours | Minimum Grade |
| :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |
| 4 GCU 102: Introduction to Human Geography (SB \& G) | 3 | C |
| Natural Science - Quantitative (SQ) OR Natural Science - General (SG) | 4 | C |
| ASU 101: The ASU Experience | 1 | C |
| MAT 142: College Mathematics (MA) | 3 | C |
| Elective | 3 |  |
|  | 17 |  |

- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics course
- ASU 101 or College specific equivalent First Year Seminar required of all freshman students.

| Term 2-18-33 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 GCU 121: World Geography (SB \& G) | 3 | C |  |
| 4 SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| GPH 111: Introduction to Physical Geography (SQ) | 4 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 34-48 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| Human Geography |  |  |  |
| GCU 141: Introduction to Economic Geography (SB \& G) OR <br> GCU 322: Geography of U.S. and Canada (SB \& C) OR <br> GCU 351: Population Geography (SB \& G) OR <br> GCU 361: Urban Geography (SB) | 3 | C |  |
| EDT 180: Computer Literacy (CS) OR <br> EDT 321: Computer Literacy (CS) | 3 |  |  |
| Physical Geography |  |  |  |
| GPH 210: Society and Environment (G) OR <br> GPH 211: Landform Processes (SQ) OR <br> GPH 212: Introduction to Meteorology (SQ) AND <br> GPH 214: Introduction to Meteorology Laboratory (SQ) OR GPH 314: Global Change (HU \& G) | 3-4 | C |  |

HST 109: United States to $1865((\mathrm{HU}$ or SB) \& H) OR Humanities, Fine Arts and Design
(HU) AND Historical Awareness (H)
(HU) AND Historical Awareness (H) 3
$\qquad$

1. Minimum 2.50 GPA ASU Cumulative.

Maintain 2.50 GPA in Critical Tracking Courses.
Milestone: Intent to Progress Online Form.
Complete First-Year Composition requirement.

| Term 4 49-63 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 BLE 220: Foundations of Structured English Immersion | 3 | C |  |
| GPH Upper Division Elective OR GCU Upper Division Elective | 6-7 | C |  |
| HST 109: United States to 1865 ((HU or SB) \& H) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 | C |  |
| 1. Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Milestone: Attend PTPP Enrollment Workshop. |  |  |  |
| Milestone: Must complete at least 60 credits to progress into PTPP. |  |  |  |
| Milestone: DPS Fingerprint Clearance Card. |  |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 5 64-76 Credit Hours | Hours | Minimum Grade | Notes |
| TEL 311: Instruction and Management in the Inclusive Classroom | 3 | C |  |
| TEL 313: Educational Technology in the K-12 Curriculum | 3 | C |  |
| TEL 314: Classroom Assessment | 3 | C |  |
| TEL 315: Child and Adolescent Development (L or SB) | 3 | C |  |
| SED 396: Field Experience I | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 6 77-92 Credit Hours | Hours | Minimum Grade | Notes |
| BLE 407: SEI for Secondary Students | 3 | C |  |
| GPH Upper Division Elective OR GCU Upper Division Elective | 3-4 | C |  |
| RDG 323: Literacy Processes in Content Areas | 3 | C |  |
| SED 480: Special Methods of Teaching Social Studies | 3 | C |  |
| SED 397: Field Experience II | 1 | Y |  |
| SPE 417: Inclusion Practices at the Secondary Level | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 7 93-108 Credit Hours | Hours | Minimum Grade | Notes |
| GCU 414: Teaching Geography Standards | 3 | C |  |
| GPH Upper Division Elective OR GCU Upper Division Elective | 3 | C |  |
| SED 321: Critical Issues in Secondary Education (L) | 3 | C |  |
| SED 322: Classroom Leadership in Secondary Schools | 3 | C |  |
| SED 496: Field Experience III | 1 | Y |  |
| Elective | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| SED 478: Student Teaching in the Secondary School | 12 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 12 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4 UNIVERSITY

## 2011-2012 Major Map Secondary Education (German), BAE

Mary Lou Fulton Teachers College
Campus:Polytechnic, Tempe, West
EDGERBAE

| Term 1 0-17 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| EDT 180: Computer Literacy (CS) OR EDT 321: Computer Literacy (CS) | 3 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 GER 201: Intermediate German (G) | 4 | C | - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| ASU 101: The ASU Experience | 1 | C |  |
| MAT 142: College Mathematics (MA) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 2 18-34 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| 1. BLE 220: Foundations of Structured English Immersion | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 GER 202: Intermediate German (G) | 4 | C |  |
| Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 | C |  |
| 1. SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 3 35-50 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| GER 311: German Conversation (G) OR GER 312: German Conversation (G) | 3 | C |  |
| 4 GER Upper Division Elective | 3 | C |  |
| 1 Natural Science - Quantitative (SQ) | 4 | C |  |
| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 | C |  |
| Related Area Course | 3 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Milestone: DPS Fingerprint Clearance Card. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 51-65 Credit Hours Critical course signified by 4 . | Hours | Minimum Grade | Notes |
| GER 313: German Composition (G) | 3 | C |  |
| GER Upper Division Elective | 3 | C |  |


| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 | C |  |
| :---: | :---: | :---: | :---: |
| TEL 315: Child and Adolescent Development (L or SB) | 3 | C |  |
| Related Area Course | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Milestone: Attend PTPP Enrollment Workshop. |  |  |  |
| Milestone: Must complete at least 60 credits to progress into PTPP. |  |  |  |
| Milestone: Intent to Progress Online Form. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 66-84 Credit Hours | Hours | Minimum Grade | Notes |
| GER 411: Advanced Grammar and Conversation (G) | 3 | C |  |
| GER 421: German Literature (HU) | 3 | C |  |
| TEL 311: Instruction and Management in the Inclusive Classroom | 3 | C |  |
| TEL 313: Educational Technology in the K-12 Curriculum | 3 | C |  |
| TEL 314: Classroom Assessment | 3 | C |  |
| SLC 479: Introduction to Teaching Foreign Languages | 3 | C |  |
| SED 396: Field Experience I | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 19 |  |  |
| Term 6 85-100 Credit Hours | Hours | Minimum Grade | Notes |
| GER 412: Advanced Grammar and Composition (G) | 3 | C |  |
| BLE 407: SEI for Secondary Students | 3 | C |  |
| SPE 417: Inclusion Practices at the Secondary Level | 3 | C |  |
| RDG 323: Literacy Processes in Content Areas | 3 | C |  |
| SLC 480: Methods of Teaching Foreign Languages | 3 | C |  |
| SED 397: Field Experience II | 1 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 7 101-113 Credit Hours | Hours | Minimum Grade | Notes |
| GER 422: German Literature (L or HU) | 3 | C |  |
| SED 321: Critical Issues in Secondary Education (L) | 3 | C |  |
| SED 322: Classroom Leadership in Secondary Schools | 3 | C |  |
| SED 496: Field Experience III | 1 | C |  |
| SLC 498: Pro-Seminar | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 8 114-121 Credit Hours | Hours | Minimum Grade | Notes |
| SED 478: Student Teaching in the Secondary School | 8-12 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |

Total Hours: 121
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map

## Secondary Education (History), BAE

Mary Lou Fulton Teachers College
Campus:Polytechnic, Tempe, West
TEHISBAE

| Term 1 $0-16$ Credit Hours Critical course signified by |  |  |
| :--- | :--- | :---: |
| ASU 101: The ASU Experience | Hours | Minimum <br> Grade |
| ENG 101 or ENG 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107 or ENG 108: English for Foreign Students | 1 | C |
| HST 109: United States to 1865 ((HU or SB) \& H) OR <br> HST 110: United States Since 1865 (SB \& H) | 3 | C |
| MAT 142: College Mathematics (MA) |  | 3 |

- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics course
- ASU 101 or College specific equivalent First Year Seminar required of all freshman students.

| Term 2 17-32 Credit Hours Critical course signified by 4 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| HST 109: United States to 1865 ((HU or SB) \& H) OR HST 110: United States Since 1865 (SB \& H) | 3 | C |  |
| Natural Science - Quantitative (SQ) OR Natural Science - General (SG) | 4 | C |  |
| 4 SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| History Related Area | 3 | C |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 33-47 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 4 BLE 220: Foundations of Structured English Immersion | 3 | C |  |
| EDT 180: Computer Literacy (CS) OR EDT 321: Computer Literacy (CS) | 3 | C |  |
| Complete 2 courses: History Related Area | 6 | C |  |
| Non-U.S. History | 3 | C |  |
| 4. Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| 1. Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Milestone: Intent to Progress Online Form. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 1 Natural Science - Quantitative (SQ) | 4 | C |  |
| History Related Area | 3 | C |  |
| Upper Division Non-U.S. History | 3 | C |  |
| Complete 2 courses: <br> Upper Division U.S History | 6 | C |  |

Maintain 2.50 GPA in Critical Tracking Courses.
Milestone: Attend PTPP Enrollment Workshop.
Milestone: Must complete at least 60 credits to progress into PTPP.
Milestone: DPS Fingerprint Clearance Card.
Term hours subtotal: 16

| Term 5 64-79 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| HST 300: Historical Inquiry OR HIS 300: Course not found |  | 3 | C |  |
| SED 396: Field Experience I |  | 1 | Y |  |
| TEL 311: Instruction and Management in the Inclusive Classroom |  | 3 | C |  |
| TEL 313: Educational Technology in the K-12 Curriculum |  | 3 | C |  |
| TEL 314: Classroom Assessment |  | 3 | C |  |
| TEL 315: Child and Adolescent Development (L or SB) |  | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 6 80-95 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ |  | Hours | Minimum Grade | Notes |
| BLE 407: SEI for Secondary Students |  | 3 | C |  |
| HST 498: Pro-Seminar OR <br> HIS 498: Course not found |  | 3 | C |  |
| HST 480: Methods of Teaching History: Classroom Resources OR SED 480: Special Methods of Teaching Social Studies |  | 3 | C |  |
| RDG 323: Literacy Processes in Content Areas |  | 3 | C |  |
| SPE 417: Inclusion Practices at the Secondary Level |  | 3 | C |  |
| SED 397: Field Experience II |  | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 7 96-111 Credit Hours |  | Hours | Minimum Grade | Notes |
| HST 481: Methods of Teaching History: Community Resources |  | 3 | C |  |
| SED 321: Critical Issues in Secondary Education (L) |  | 3 | C |  |
| SED 322: Classroom Leadership in Secondary Schools |  | 3 | C |  |
| SED 496: Field Experience III |  | 1 | Y |  |
| Elective |  | 3 |  |  |
| Upper Division U.S History |  | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 8 112-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| SED 478: Student Teaching in the Secondary School |  | 9 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 9 |  |  |


| Non-U.S. History | U.S. History | Upper Division U.S. History |
| :---: | :---: | :---: |
| HST 101: Global History Since 1500 (HU \& H \& G) | HST 109: United States to 1865 ((HU or SB) \& H) | HST 3** Elective |
| HST 102: Western Civilization (SB \& H) | HST 110: United States Since 1865 (SB \& H) | HST 4** Elective |
| HST 103: Western Civilization ((HU or SB) \& H) | HST 204: Afr Amer History to 1865, Capitalism $\tilde{A} \hat{A}_{i} s$ Roots and the Constitution, Harlem Renaissance Culture, Historical Themes in the US, US: Atlantic World-Age of Piracy, US: US Presidency, US: War and American Society, US: War, Culture and Memory |  |
| HST 104: Western Civilization ((HU or SB) \& G \& H) |  |  |
| HST 105: Slavic Civilization ((HU or SB) \& H) |  |  |
|  | HST 210: American Social History ((L or SB) \& H) <br> Academic Catalog Archive 2011-2 | $121587$ |


|  |  |
| :---: | :---: |
| HST 107: Asian Civilizations (SB \& G \& H) | HST 294: American Conservatism, Introduction to African American Studies, The U.S.A. 1776-1876, The West and the World, U.S. in the 19th Century |
|  |  |
| HST 201: Healing and Culture, Historical Themes in Asia, Modern Korea | HST 306: Asia: U.S. and China, Studies in United States History, The Civil Rights Movement, US Constitution: History, US: American Indian Leadership, US: American Presidency, US: Disasters in History, US: Environmental History, US: Grand Canyon History, US: Jazz and Culture in U.S. History US: Liberty and War, US: Origins Civil Rights U.S. Law, US: Race and the Law, US: Race in U.S. History, US: Urban Rebellion, US: War and American Memory, US: War, Liberty, and Law, Women in US History |
| SB) \& H) |  |
| HST 203: Historical Themes in Latin America (SB \& H) |  |
| HST 204: Afr Amer History to 1865, Capitalism $\tilde{A} \hat{A}_{i}$ s Roots and the Constitution, Harlem Renaissance Culture, Historical Themes in the US, US: Atlantic World-Age of Piracy, US: US Presidency, US: War and American Society, US: War, Culture and Memory |  |
|  | HST 313: American Cultural History to 1865 (SB \& H) |
|  | HST 314: American Cultural History Since 1865 ((HU or SB) \& H) |
| HST 240: Introduction to Southeast Asia ((HU or SB) \& G) |  |
|  | HST 315: Political History of the U S (SB \& H) |
| HST 303: ASIA: Confucian Texts, ASIA: Japan in Film, ASIA: Modern South Asia, ASIA: Women in Asia, Studies in Asian History, Technology,Culture\&Society in Modern Japan |  |
|  |  |
|  | HST 318: History of Engineering ((L or SB) \& G) |
| HST 304: Barbarians in Dark Ages, Britain and New Imperialism, Creation and Destruction, End of Roman Republic, Engl Middle Ages 1471-1529, Europe in World History Since 1789, European Enlightenment, European Migrations, History of Jewish Mysticism, King Alfred: Man or Myth?, Medieval England 1216-1399, Middle Ages Recyc: Medievalism, Migration in Modern European History, Occup and Collab w/Europe, Pausanias: Trvlr in Roman, Religion/Rblln:SE Englnd, Rockers/Rebels/Romantics, Scottish History, Shakespeare and the Virgin Queen, Shoah: History, Memory, and Representation, Studies in European History, Survey Eng Literature\&Culture Cambridge Connection | HST 319: U.S. Urban History to 1850 (SB \& H) |
|  | HST 320: U.S. Urban History since 1850 (SB \& H) |
|  | HST 321: Constitutional Hist/US to 1965 (SB \& H) |
|  | HST 322: Constitutional History of the United States Since 1865 (SB \& H) |
|  | HST 325: Immigration and Ethnicity in the United States (SB \& H \& C) |
|  | HST 327: Women in US History 1600 to 1880 ((HU or SB) \& C \& H) |
| HST 305: Studies in Latin American History |  |
| $\text { T } 30$ | HST 328: Women in US History, 1880-1980 ((HU or SB) \& C \& H) |
| HST 347: Ancient Greece (SB \& H) | HST 329: Women in 20th-Century US West ( $\mathrm{H} \& \mathrm{C}$ ) |
| HST 348: Rome (SB \& H) | HST 330: Mexican Women in the U.S. ((L or SB) \& H \& C) |
|  |  |
|  | HST 331: Mexican American History to 1900$(S B \& H \& C)$ |
|  |  |
|  | HST 332: Mexican American History Since 1900 (SB \& H \& C) |
|  | HST 333: African American History to 1865 (SB \& H \& C) |
|  |  |
|  | HST 334: African American History Since 1865 ((HU or SB) \& C \& H) |
|  |  |
| HST 354: Revolutionary Europe (SB \& H) | HST 337: American Indian History to 1900 (( HU or SB) \& C \& H) |
| T 355: Total War \& the | HST 338: American Indian History since 1900 ((HU or SB) \& C \& H) |
|  | HST 341: U.S. West 19th Century (SB \& H) |
| HST 358: Jewish History from the Bible to 1492 (SB \& H) | HST 342: US West 20th Century (SB \& H) |
| ST 359: Jewish History from 1492 to 1948 B \& G \& H) | HST 343: American Southwest ((L or SB) \& H) |
| HST 361: Witchcraft and Heresy in Europe ((L or HU )\& H) | HST 344: Arizona (SB \& H) |
|  | American History and American Film, American Islam, American Military Histor |


| HST 362: Sex and Society in Classical and Medieval Europe (SB \& H) |
| :---: |
| HST 363: Sex and Society in Early Modern Europe (( HU or SB ) \& H) |
| HST 364: Sex and Society in Modern Europe ((L or SB) \& H) |
| HST 365: Women in Europe, 1750 to Present (( L or HU or SB ) \& H ) |
| HST 366: England to 1689 (SB \& H) |
| HST 367: Modern Britain (SB \& H) |
| HST 368: Culture and Imagination in European History (HU \& H) |
| HST 370: Eastern Europe in Transition (SB \& G \& H) |
| HST 372: Modern Middle East (SB \& G \& H) |
| HST 375: Colonial Latin America (SB \& H) |
| HST 376: Modern Latin America (SB \& H) |
| HST 377: Women in Colonial Latin America (H) |
| HST 378: Latin American Women: The National Period (SB \& G \& H) |
| HST 380: Cultural History of Latin America (SB \& H) |
| HST 383: China (SB \& H) |
| HST 384: China (SB \& G \& H) |
| HST 385: History of Chinese Medicine (HU \& H \& G) |
| HST 386: Interpreting China's Classics ((L or HU ) \& H) |
| HST 387: Japan ((L or SB) \& H) |
| HST 388: Japan (SB \& G \& H) |
| HST 389: Japan Society and Values/Premod |
| HST 391: Modern Southeast Asia (SB \& G \& H) |
| HST 419: 20th Century Chicano/a History |
| HST 423: The Tudor Monarchy (SB \& H) |
| HST 424: Stuart Transform of England (SB \& H) |
| HST 426: The British Empire (SB \& H) |
| HST 427: French Revolut/Napoleonic Era (SB \& H) |
| HST 428: Modern France (SB \& G \& H) |
| HST 429: Modern Germany (SB \& G \& H) |
| HST 431: East Euro/the Balkans-Pre 1914 (SB \& H) |
| HST 432: East Euro/ the Balkans-20 Cent (SB \& G \& H) |
| HST 435: The Russian Empire (SB \& H) |
| HST 436: The Soviet Experiment (SB \& G \& H) |
| HST 437: Spain through the Golden Age ((HU or SB) \& H) |
| HST 438: Modern Spain ((HU or SB) \& G \& H) |

HST 363: Sex and Society in Early Modern
((L or SB) \& H)
(L or HU or
HST 366: England to 1689 (SB \& H)
HST 367: Modern Britain (SB \& H)
HST 368: Culture and Imagination in
European History (HU \& H)
HST 370: Eastern Europe in Transition (SB \&
G \& H)
HST 372: Modern Middle East (SB \& G \&
H)
HST 375: Colonial Latin America (SB \& H)
HST 376: Modern Latin America (SB \& H)
HST 377: Women in Colonial Latin America
(H)
HST 378: Latin American Women: The
National Period (SB \& G \& H)
HST 380: Cultural History of Latin America
HST 383: China (SB \& H)
HST 384: China (SB \& G \& H)
HST 385: History of Chinese Medicine (HU
\& H \& G)
HST 386: Interpreting China's Classics ((L or
HU )\& H)
HST 387: Japan ((L or SB) \& H)
HST 388: Japan (SB \& G \& H)
HST 389: Japan Society and Values/Premod
HST 391: Modern Southeast Asia (SB \& G \&
H)
HST 419: 20th Century Chicano/a History
HST 423: The Tudor Monarchy (SB \& H)
HST 424: Stuart Transform of England (SB \&
H)
HST 427: French Revolut/Napoleonic Era
(SB \& H)
HST 428: Modern France (SB \& G \& H)
HST 429: Modern Germany (SB \& G \& H)
HST 431: East Euro/the Balkans-Pre 1914
(SB \& H)
HST 432: East Euro/ the Balkans-20 Cent
(SB \& G \& H)
HST 436: The Soviet Experiment (SB \& G \&
H)
HST 437: Spain through the Golden Age
HST 438: Modern Spain ((HU or SB) \& G \&
H)

| HST 443: The United States \& Latin America (SB \& G \& H) | Slave Narratives, U.S. 1900-1945 I, U.S. 1900-1945 II, U.S. and U.K. Comparative History |
| :---: | :---: |
| HST 445: 20th-Century Cuba (SB \& G \& H) | HST 405: Colonial American History to 1763$(\mathrm{SB} \& \mathrm{H})$ |
| HST 446: Colonial Mexico (SB \& H) |  |
| HST 447: Modern Mexico (SB \& H) | HST 406: American Revolution/1763-1789 $(\mathrm{SB} \& \mathrm{H})$ |
| HST 451: Chinese Cultural History ((HU or SB) \& H) | HST 407: Early U.S. Republic/1789-1850 ((L or SB) \& H) |
| HST 452: Chinese Cultural History (SB \& G \& H) | HST 408: Civil War and Reconstruction ((L or SB) \& H) |
| HST 453: The People's Republic of China (SB \& G \& H) | HST 409: Emergence Modern U.S. 1877-1918 (SB \& H) |
| HST 455: The United States and Japan (SB \& G \& H) | HST 410: Modern U.S., 1918 to1945 (SB \& H) |
| HST 456: The Vietnam War (SB \& G \& H) | HST 411: Postwar U.S., 1945-1973 (SB \& H) |
|  | HST 412: Contemporary U.S./1973- Present (SB \& H) |
|  | HST 414: The Modern U.S. Economy (SB \& H) |
|  | HST 415: Unequal Sisters/Women-Pol/Cult ((L or SB) \& H \& C) |
|  | HST 416: Western Rivers (L \& H) |
|  | HST 417: Topics in Mexican American History (SB \& H \& C) |
|  | HST 443: The United States \& Latin America (SB \& G \& H) |
|  | HST 455: The United States and Japan (SB \& G \& H) |
|  | HST 456: The Vietnam War (SB \& G \& H) |
|  | HST 494: African American Cultural History, Engaging Arizona, North American Migrations |
| History Related Areas |  |
| AFH Elective |  |
| AFR Elective |  |
| AFS Elective |  |
| AIS Elective |  |
| APA Elective |  |
| APH Elective |  |
| ARS Elective |  |
| HON Elective |  |
| HPS Elective |  |
| HUM Elective |  |
| PHI Elective |  |
| POL Elective |  |
| POS Elective |  |
| REL Elective |  |
| SOC Elective |  |
| TCL Elective |  |
| WSH Elective |  |
| WST Elective |  |
| INT 310: History of Interior Design I (HU \& H) |  |


| INT 311: History of Interior Design II (HU \& H) |
| :---: |
| IND 316: 20th-Century Design I (HU \& H) |
| IND 317: 20th-Century Design II (HU \& H) |
| MCO 418: History of Mass Communication (SB \& H) |
| MUS 340: Classical Music in America, Music for the Concert Hall, Stage, and Screen, Western Music History |
| MUS 354: Beatles, Blues, Blues to Heavy Metal, Country, Elvis, Global Pop, Hip-Hop, Michael Jackson, Music Since the Beatles, Pop Divas from Madonna to Rihanna, Popular Music, Rock Since 1970, Rock: The Early Years, The Beatles After the Beatles, Women in Jazz |
| MUS 355: Survey of American Music (HU \& C \& H) |
| MUS 410: History of Women in Music (HU \& C \& H) |
| PUP 100: Introduction to Environmental Design (HU \& H \& G) |
| PUP 200: Cities in Cinema (HU \& H \& G) |
| PUP 412: History of the City ((L or HU )\& H) |
| PUP 445: Women and Environments (C) |
| THE 320: History of the Theatre I (HU \& H) |
| THE 321: History of Theatre (HU \& H) |
| BIO 316: History of Biology: Conflicts and Controversies (H) |
| BIO 318: History of Medicine (H) |
| BIO 344: Origins, Evolution, and Creation |
| BIO 346: The Darwinian Revolution |
| CHI 321: Chinese Literature (HU) |
| CHI 322: Chinese Literature (HU \& G) |
| CHI 345: Chinese Film and Civilization |
| CHI 413: Introduction to Literary Chinese I (HU) |
| CHI 414: Classical Chinese I, Classical Chinese II, Introduction to Literary Chinese II |
| FRE 205: Readings in French Literature (G) |
| FRE 319: Business French (G) |
| FRE 321: French Literature ((L or HU )\& H) |
| FRE 322: French Literature (L or HU) |
| FRE 441: French Literature of the 17th Century (HU) |
| FRE 442: French Literature of the 17th Century (HU \& H) |
| FRE 445: French Literature of the 18th Century (L or HU) |
| FRE 451: French Poetry of the 19th Century |
| FRE 452: French Novel of the 19th Century (HU) |
| FRE 453: Theater of the 19th Century (L or $\mathrm{HU})$ |
| FRE 461: Modern Narrative (HU) |
| ) |

FRE 471: The Literature of Francophone Africa and the Caribbean (L or HU)

FRE 472: Franco-Canadian Civilization
GER 421: German Literature (HU)

GER 422: German Literature (L or HU)
GER 453: German Literary Masterpieces on Film (HU \& H \& G)

GRK 301: Ancient Greek Literature I (HU)
GRK 302: Ancient Greek Literature II (HU)
HEB 375: Contemporary Culture of Israel (HU \& G)

ITA 325: Introduction to Italian Literature II (HU)

ITA 430: Italian Literature of the Middle Ages (HU)

ITA 441: Dante: Divina Commedia (L or HU)
ITA 443: Italian Literature of the Renaissance ( $\mathrm{HU} \& \mathrm{H}$ )

ITA 446: Italian Literature of the 18 th and 19th Centuries (HU)

ITA 449: 20th-Century Italian Literature (HU \& G)

JPN 321: Reading Modern Japanese Texts I ((L or HU) \& G)

JPN 414: Introduction to Classical Japanese
LAT 421: Roman Literature (HU)
LAT 422: Roman Literature (HU)
POR 321: Luso-Brazilian Literature (HU)
RUS 321: Foundations of Russian Literature (HU \& H)

RUS 322: Great Russian Writers of the 19th Century (L or HU)

RUS 323: Modern Russian Literature and the Soviet Legacy ((L or HU) \& G)

RUS 420: Russian Poetry (L or HU)
RUS 421: Pushkin (L or HU)
RUS 423: Dostoyevsky (L or HU)
RUS 424: Tolstoy (L or HU)
RUS 425: Chekhov (L or HU)
RUS 430: Russian Short Story (L or HU)
RUS 441: Survey of Russian Culture ((L or HU) \& G \& H)

SPA 325: Introduction to Hispanic Literature (HU)

SPA 425: Spanish Literature (HU)
SPA 426: Spanish Literature (HU)
SPA 427: Spanish American Literature (L)
SPA 428: Spanish American Literature (L \& G)

SPA 429: Mexican Literature
SPA 434: Drama of the Golden Age
SPA 435: Cervantes-Don Quijote
SPA 454: 19th-Century Spanish American Narrative

SPA 456: 20th-Century Spanish American
Fiction
SPA 464: Mexican American Literature ((HU or SB) \& C)

SPA 485: Mexican American Short Story (L)
SPA 486: Mexican American Novel
SPA 487: Mexican American Drama

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Secondary Education (Japanese), BAE

Mary Lou Fulton Teachers College
Campus:Polytechnic, Tempe, West
EDJPNBAE

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| 4 JPN 301: Third-Year Japanese I (G) | 3 | C |  |
| 4 MAT 142: College Mathematics (MA) | 3 | C |  |
| ASU 101: The ASU Experience | 1 | C |  |
| HST 109: United States to 1865 ((HU or SB) \& H) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Elective | 1 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-30 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| EDT 180: Computer Literacy (CS) OR EDT 321: Computer Literacy (CS) | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| (.) JPN 302: Third-Year Japanese II (G) | 3 | C |  |
| 1. Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 4 | C |  |
| 1. SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-46 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| 4 Natural Science - Quantitative (SQ) | 4 | C |  |
| Complete 2 courses: <br> JPN Upper Division Elective | 6 | C |  |
| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 | C |  |
| Related Area: Historical Overview | 3 | C |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Milestone: Intent to Progress Online Form. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 47-61 Credit Hours Critical course signified by 4 | Hours | Minimum Grade | Notes |
| 4 BLE 220: Foundations of Structured English Immersion | 3 | C |  |
| JPN Upper Division Elective | 3 | C |  |
| TEL 315: Child and Adolescent Development (L or SB) | 3 | C |  |
| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 | C |  |
| Related Areas | 3 | C |  |


| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| :---: | :---: | :---: | :---: |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Milestone: Attend PTPP Enrollment Workshop. |  |  |  |
| Milestone: Must complete at least 60 credits to progress into PTPP. |  |  |  |
| Milestone: DPS Fingerprint Clearance Card. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 5 62-80 Credit Hours | Hours | Minimum Grade | Notes |
| JPN 414: Introduction to Classical Japanese | 3 | C |  |
| SLC 421: Japanese Literature in Translation ((L or HU) \& G) | 3 | C |  |
| SLC 479: Introduction to Teaching Foreign Languages | 3 | C |  |
| TEL 311: Instruction and Management in the Inclusive Classroom | 3 | C |  |
| TEL 313: Educational Technology in the K-12 Curriculum | 3 | C |  |
| TEL 314: Classroom Assessment | 3 | C |  |
| SED 396: Field Experience I | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 19 |  |  |
| Term 6 81-96 Credit Hours | Hours | Minimum Grade | Notes |
| JPN 401: Reading Modern Japanese Texts I ((L or HU) \& G) | 3 | C |  |
| BLE 407: SEI for Secondary Students | 3 | C |  |
| SPE 417: Inclusion Practices at the Secondary Level | 3 | C |  |
| RDG 323: Literacy Processes in Content Areas | 3 | C |  |
| SLC 480: Methods of Teaching Foreign Languages | 3 | C |  |
| SED 397: Field Experience II | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 7 97-112 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> JPN Upper Division Elective | 6 | C |  |
| SED 321: Critical Issues in Secondary Education (L) | 3 | C |  |
| SED 322: Classroom Leadership in Secondary Schools | 3 | C |  |
| SED 496: Field Experience III | 1 | Y |  |
| SLC 498: Pro-Seminar | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 8 113-120 Credit Hours | Hours | Minimum Grade | Notes |
| SED 478: Student Teaching in the Secondary School | 8-12 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |


| Related Area: Historical Overview | Related Area | Upper Division Japanese Electives |
| :---: | :---: | :---: |
| ARS 201: Art of Asia (HU \& H \& G) | ARS 472: Art of China (HU) | JPN 309: Japanese Oral Communication I |
| ARS 473: Art of Japan (HU) | ARS 473: Art of Japan (HU) | JPN 310: Japanese Oral Communication II |
| HST 108: Introduction to Japan (SB \& G \& | ARS 475: Chinese Painting (HU) | JPN 311: Japanese Composition I (G) |
|  | GCU 326: Geography of Asia (SB \& G) | JPN 312: Japanese Composition II (G) |
| HST 387: Japan ((L or SB) \& H) | ian Civilizations ((HU or SB) \& | JPN 394: Special Topics |
| REL 355: Japanese Cities and Cultures to 1800 (HU \& H) | G \& H) | JPN 445: Readings in Modern Japanese |
| REL 444: Religion in Japan (HU \& H \& G) | HST 107: Asian Civilizations (SB \& G \& H) | Letters and Culture |
|  | HST 108: Introduction to Japan (SB \& G \& H) | JPN 485: Literary Translation: Theory and Practice |

HST 201: Historical Themes in Asia
HST 383: China (SB \& H)
HST 384: China (SB \& G \& H)
HST 385: History of Chinese Medicine (HU Topics
\& H \& G)
HST 386: Interpreting China's Classics ((L or
HU ) \& H)
HST 387: Japan ((L or SB) \& H)
HST 388: Japan (SB \& G \& H)
HST 452: Chinese Cultural History (SB \& G
\& H)
POS 445: Asian Political Thought (SB \& G)
POS 451: China, Japan, and the Koreas (SB
\& G)
POS 452: China (SB \& G)
POS 468: Comparative Asian foreign Policies
(SB \& G)
REL 344: Religion and Values in Japanese
Life (HU \& G)
REL 351: Buddhism ((L or HU) \& G)
REL 355: Japanese Cities and Cultures to
1800 (HU \& H)
REL 444: Religion in Japan (HU \& H \& G)

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum Cumulative GPA: 2.00 minimum Total hrs at ASU: 30 minimum Hrs Resident Credit for

## Academic Recognition: 56 minimum

 Total Community College Hrs: 64 maximum
## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Secondary Education (Mathematics), BAE

Mary Lou Fulton Teachers College
Campus:Polytechnic, Tempe, West
TEMATBAE

| Term 1 0-15 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - ASU 101 is for freshman students only. Not required for transfer students <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into First- Year Composition courses <br> - ASU Math Placement Exam score determines placement into Mathematics course |
| 4 MAT 270: Calculus with Analytic Geometry I (MA) | 4 | C |  |
| Natural Science - Quantitative (SQ) OR Natural Science - General (SG) | 4 | C |  |
| ASU 101: The ASU Experience | 1 | C |  |
| HST 109: United States to 1865 ((HU or SB) \& H) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 2 16-31 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| ACO 101: Introduction to Computer Science (CS) OR <br> CSE 100: Principles of Programming with C++ (CS) OR CSE 110: Principles of Programming with Java (CS) OR CSE 205: Object-Oriented Programming and Data Structures (CS) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MAT 271: Calculus with Analytic Geometry II (MA) | 4 | C |  |
| 4 SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 MAT 272: Calculus with Analytic Geometry III (MA) | 4 | C |  |
| MAT 300: Mathematical Structures (L) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Elective | 3 |  |  |
| 4. Minimum 2.50 GPA ASU Cumulative. |  |  |  |

Milestone: Intent to Progress Online Form.
Complete First-Year Composition requirement.
Term hours subtotal: 16

| Term 4 $48-63$ Credit Hours Critical course signified by | Hours | Minimum <br> Grade |
| :--- | :--- | :---: |
| BLE 220: Foundations of Structured English Immersion | 3 | Notes |
| Natural Science - Quantitative (SQ) | 4 | C |
| MAT 310: Introduction to Geometry | 3 | C |
| STP 420: Introductory Applied Statistics (CS) | 3 | C |
| Elective | 3 |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |
| M |  |  |



Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 4 <br> UNIVERSITY

## 2011-2012 Major Map

## Secondary Education (Physical Education), BAE

Mary Lou Fulton Teachers College
Campus:Polytechnic
ECPPEBAE

| Term 1 0-16 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 BIO 100: The Living World (SQ) OR Natural Science - Quantitative (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MAT 142: College Mathematics (MA) | 3 | C | - ASU Math Placement Exam score determines placement in Mathematics course |
| ASU 101: The ASU Experience | 1 | C |  |
| EXW 212: Instructional Competency Laboratory OR <br> PPE 210: Teaching Fitness Activities for K-12 Students OR <br> PPE 215: Teaching Team Sports OR <br> PPE 220: Teaching Lifetime Activity K-12 OR <br> PPE 225: Teaching Cooperative and Initiative Games | 2 | C | - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| TEL 111: Exploration of Education (SB) OR Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-31 Credit Hours Critical course signified by 4 | Hours | Minimum Grade | Notes |
| 4 BIO 201: Human Anatomy and Physiology I (SG) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| EXW 212: Instructional Competency Laboratory OR <br> PPE 210: Teaching Fitness Activities for K-12 Students OR <br> PPE 215: Teaching Team Sports OR <br> PPE 220: Teaching Lifetime Activity K-12 OR <br> PPE 225: Teaching Cooperative and Initiative Games | 2 | C |  |
| HST 109: United States to 1865 ((HU or SB) \& H) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 32-46 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |

BIO 202: Human Anatomy and Physiology II (SG) C


| 1. EDT 180: Computer Literacy (CS) | 3 | C |  |
| :---: | :---: | :---: | :---: |
| 1. TEL 212: Understanding the Culturally Diverse Child (C) | 3 | C |  |
| PPE 365: Teaching Physical Activity Concepts (L) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  |  |
| Elective | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Milestone: Attend PTPP Enrollment Workshop. |  |  |  |
| Milestone: Must complete at least 60 credits to progress into PTPP. |  |  |  |
| Term hours subtotal: | 18 |  |  |
| Term 5 65-79 Credit Hours | Hours | Minimum Grade | Notes |
| BLE 407: SEI for Secondary Students | 3 | C |  |
| EDP 311: Educational Psychology for Future Teachers (SB) | 3 | C |  |
| EXW 330: Kinesiological Foundations of Movement OR EXW 335: Physical Activity and Fitness Concepts | 3-4 | C |  |
| TEL 313: Educational Technology in the K-12 Curriculum | 3 | C |  |
| TEL 315: Child and Adolescent Development (L or SB) | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 6 80-96 Credit Hours | Hours | Minimum Grade | Notes |
| EXW 330: Kinesiological Foundations of Movement OR EXW 335: Physical Activity and Fitness Concepts | 4-3 | C |  |
| PPE 350: Physical Education for the Elementary School | 3 | C |  |
| PPE 355: Physical Education in the Secondary School | 3 |  |  |
| PPE 360: Adapted and Inclusive Physical Education | 3 | C |  |
| PPE 474: Field Experience in Physical Education | 1 |  |  |
| RDG 323: Literacy Processes in Content Areas | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 17-16 |  |  |
| Term 7 97-108 Credit Hours | Hours | Minimum Grade | Notes |
| PPE 480: Professional Seminar for Physical Education | 3 | C |  |
| PPE 484: Internship | 6 | C |  |
| PPE OR EXW Upper Division Elective | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 12 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| PPE 484: Internship | 6 | C |  |
| SED 322: Classroom Leadership in Secondary Schools | 3 | C |  |
| Elective | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 12 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

- Computer/Statistics/Quantitative Applications
(CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Secondary Education (Physics), BAE

Mary Lou Fulton Teachers College
Campus:Polytechnic, Tempe, West
EDPHYBAE

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - ASU101 is for freshman students only. Not required for transfer students <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into First-Year Composition courses <br> - ASU Math Placement Exam score determines placement into Mathematics courses <br> - Recommended HST109 for HU, H and meets the US Constitution requirement for certification |
| 4 MAT 270: Calculus with Analytic Geometry I (MA) | 4 | C |  |
| ASU 101: The ASU Experience | 1 | C |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 14 |  |  |


| Term 2 15-31 Credit Hours Critical course signified by ${ }^{\text {- }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 . MAT 271: Calculus with Analytic Geometry II (MA) | 4 | C |  |
| PHY 121: University Physics I: Mechanics (SQ) AND PHY 122: University Physics Laboratory I (SQ) OR PHY 150: Physics I (SQ) | 4 | C |  |
| 4 SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | B |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 3 32-45 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 1. BLE 220: Foundations of Structured English Immersion | 3 | C |  |
| 4 MAT 272: Calculus with Analytic Geometry III (MA) | 4 | C |  |
| PHY 131: University Physics II: Electricity and Magnetism (SQ) AND PHY 132: University Physics Laboratory II (SQ) OR PHY 151: Physics II (SQ) | 4 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| 4. Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| 1. Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |

Milestone: Intent to Progress Online Form.
Term hours subtotal: 14

| Term 4 46-57 Credit Hours Critical course signified by ${ }^{\text {(1) }}$ | Hours | Minimum Grade |
| :---: | :---: | :---: |
| 4. PHY 201: Mathematical Methods in Physics I (CS) | 3 | C |
| (1. PHY 241: University Physics III OR PHY 252: Physics III (SQ) | 3-4 | C |
| TEL 315: Child and Adolescent Development (L or SB) | 3 | C |
| PHY Upper Division Elective | 3 | C |

[^25]| 9. Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Milestone: Must complete at least 56 credits to progress into PTPP. |  |  |  |  |
| Milestone: Attend PTPP Enrollment Workshop. |  |  |  |  |
| Milestone: DPS Fingerprint Clearance Card. |  |  |  |  |
|  | Term hours subtotal: | 12-13 |  |  |
| Term 5 58-75 Credit Hours |  | Hours | Minimum Grade | Notes |
| PHY 302: Mathematical Methods in Physics II |  | 2 | C |  |
| PHY 310: Classical Particles, Fields, and Matter I |  | 3 | C |  |
| SED 396: Field Experience I |  | 1 | Y |  |
| TEL 311: Instruction and Management in the Inclusive Classroom |  | 3 | C |  |
| TEL 313: Educational Technology in the K-12 Curriculum |  | 3 | C |  |
| TEL 314: Classroom Assessment |  | 3 | C |  |
| PHY Upper Division Elective |  | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 18 |  |  |
| Term 6 76-91 Credit Hours |  | Hours | Minimum Grade | Notes |
| BLE 407: SEI for Secondary Students |  | 3 | C |  |
| PHY 333: Electronic Circuits and Measurements |  | 3 | C |  |
| PHY 480: Methods of Teaching Physics |  | 3 | C |  |
| RDG 323: Literacy Processes in Content Areas |  | 3 | C |  |
| SED 397: Field Experience II |  | 1 | Y |  |
| SPE 417: Inclusion Practices at the Secondary Level |  | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 7 92-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| PHY 314: Quantum Physics I OR <br> PHY 361: Introductory Modern Physics |  | 3 | C |  |
| SED 321: Critical Issues in Secondary Education (L) |  | 3 | C |  |
| SED 322: Classroom Leadership in Secondary Schools |  | 3 | C |  |
| SED 496: Field Experience III |  | 1 | Y |  |
| PHY Upper Division Elective |  | 4 | C |  |
| SED Elective |  | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 17 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| SED 478: Student Teaching in the Secondary School |  | 12 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 12 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum Cumulative GPA: 2.00 minimum Total hrs at ASU: 30 minimum Hrs Resident Credit for Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 4 2 Arizona State UNIVERSITY

## 2011-2012 Major Map Secondary Education (Political Science), BAE

Mary Lou Fulton Teachers College Campus:Polytechnic, Tempe, West TEPOLBAE

| Term 1 0-16 Credit Hours Critical course signified by | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - ASU 101 is for freshman students only. Not required for transfer students <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into First-Year Composition courses <br> - ASU Math Placement Exam score determines placement in mathematics course |
| 4 MAT 142: College Mathematics (MA) | 3 | C |  |
| POS 110: Government and Politics (SB) OR POS 150: Comparative Government (SB \& G) OR POS 160: Global Politics (SB \& G) | 3 | C |  |
| ASU 101: The ASU Experience | 1 | C |  |
| HST 109: United States to 1865 ((HU or SB) \& H) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| AFR OR AFH OR AFS OR ASB OR ASM OR CCS OR CSH OR CSS OR ECN OR GCU OR GPH OR HST OR PGS OR PSY OR SOC OR WSH OR WST Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 2 17-32 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| POS 110: Government and Politics (SB) OR <br> POS 150: Comparative Government (SB \& G) OR <br> POS 160: Global Politics (SB \& G) | 3 | C |  |
| 1 POS 210: Political Ideologies (SB) | 3 | C |  |
| 1. SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| Natural Science - Quantitative (SQ) OR Natural Science - General (SG) | 4 | C |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| EDT 180: Computer Literacy (CS) OR EDT 321: Computer Literacy (CS) | 3 | C |  |
| 4 POS 301: Empirical Political Inquiry (SB) | 3 | C |  |
| 4 POS Elective | 3 | C |  |
| Natural Science - Quantitative (SQ) OR Natural Science - General (SG) | 4 | C |  |
| HST 109: United States to 1865 ((HU or SB) \& H) OR Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| 4 Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Milestone: Intent to Progress Online Form. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 49-63 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 4. BLE 220: Foundations of Structured English Immersion | 3 | C |  |
| AFR OR AFH OR AFS OR ASB OR ASM OR CCS OR CSH OR CSS OR ECN OR GCU OR GPH OR HST OR PGS OR PSY OR SOC OR WSH OR WST Elective | 6 |  |  |
| POS Upper Division Elective | 6 | C |  |

Minimum 2.50 GPA ASU Cumulative.

1. Maintain 2.50 GPA in Critical Tracking Courses.

Milestone: Must complete at least 60 credits to progress into PTPP
Milestone: Attend PTPP Enrollment Workshop.
Milestone: DPS Fingerprint Clearance Card.
Term hours subtotal: 15

| Term 5 64-78 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| POS 311: Arizona Constitution and Government OR POS 417: Arizona Political System (SB) | 2-3 | C |  |
| TEL 311: Instruction and Management in the Inclusive Classroom | 3 | C |  |
| TEL 313: Educational Technology in the K-12 Curriculum | 3 | C |  |
| TEL 314: Classroom Assessment | 3 | C |  |
| TEL 315: Child and Adolescent Development (L or SB) | 3 | C |  |
| SED 396: Field Experience | 1 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 6 79-94 Credit Hours | Hours | Minimum Grade | Notes |
| BLE 407: SEI for Secondary Students | 3 | C | - Minimum 2.50 ASU cumulative GPA |
| RDG 323: Literacy Processes in Content Areas | 3 | C |  |
| SED 397: Field Experience II | 1 | Y |  |
| SED 480: Special Methods of Teaching Social Studies | 3 | C |  |
| SPE 417: Inclusion Practices at the Secondary Level | 3 | C |  |
| POS Upper Division Elective | 3 | C |  |
| Term hours subtotal: | 16 |  |  |
| Term 7 95-110 Credit Hours | Hours | Minimum Grade | Notes |
| HST 480: Methods of Teaching History: Classroom Resources OR HST 481: Methods of Teaching History: Community Resources | 3 | C | - Minimum 2.50 ASU cumulative GPA |
| SED 321: Critical Issues in Secondary Education (L) | 3 | C |  |
| SED 322: Classroom Leadership in Secondary Schools | 3 | C |  |
| SED 496: Field Experience III | 1 | Y |  |
| AFR OR AFH OR AFS OR ASB OR ASM OR CCS OR CSH OR CSS OR ECN OR GCU OR GPH OR HST OR PGS OR PSY OR SOC OR WSH OR WST Elective | 3 |  |  |
| POS Upper Division Elective | 3 | C |  |
| Term hours subtotal: | 16 |  |  |
| Term 8 111-120 Credit Hours | Hours | Minimum Grade | Notes |
| SED 478: Student Teaching in the Secondary School | 10 | Y | - Minimum 2.50 ASU cumulative GPA |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map Secondary Education (Spanish), BAE

Mary Lou Fulton Teachers College
Campus:Polytechnic, Tempe, West
TESPABAE

| Term 1 0-15 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. |
| EDT 180: Computer Literacy (CS) OR EDT 321: Computer Literacy (CS) | 3 |  |  |
| 4 MAT 142: College Mathematics (MA) | 3 | C |  |
| Natural Science - Quantitative (SQ) OR <br> Natural Science - General (SG) | 4 | C |  |
| ASU 101: The ASU Experience | 1 | C |  |
| Elective | 1 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 2 16-31 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| 1. BLE 220: Foundations of Structured English Immersion | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| 1 Natural Science - Quantitative (SQ) | 4 | C |  |
| Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 32-46 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 | C |  |
| SPA 325: Introduction to Hispanic Literature (HU) | 3 | C |  |
| SPA 412: Advanced Conversation and Composition (G) | 3 | C |  |
| SPA 413: Advanced Spanish Grammar (G) | 3 | C |  |
| Upper Division SPA Civilizations | 3 | C |  |
| 4 Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| 1. Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| Milestone: Intent to Progress Online Form. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 4 47-61 Credit Hours | Hours | Minimum Grade | Notes |
| SLC 201: Introduction to Linguistics (HU or SB) OR SLC 202: Introduction to Literary and Cultural Theory | 3 | C |  |
| SPA 400: Introduction to Spanish Linguistics | 3 | C |  |
| SPA 425: Spanish Literature (HU) | 3 | C |  |
| Upper Division SPA Literature | 3 | C |  |
| SPA Upper Division Elective | 3 | C |  |
| (1) Minimum 2.50 GPA ASU Cumulative. |  |  |  |



SPA 486: Mexican American Novel
SPA 487: Mexican American Drama
SPA 494: Special Topics
POR 472: Luso-Brazilian Civilization (HU \& G)

POR 494: Special Topics

Notes:

- Language majors are inherently flexible and certain courses are preparatory, and will not count toward degree requirements. Students are strongly advised to contact their academic advisor to discuss the applicability of courses.
- Language majors are inherently flexible and certain courses are preparatory and will not count toward degree requirements. Students are strongly advised to contact their academic advisor to discuss the applicability of courses.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## Hrs Resident Credit for

Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Special Education, BAE

Mary Lou Fulton Teachers College Campus:Polytechnic, Tempe, West TESPEBAE

| Term 1 0-13 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| HST 109: United States to 1865 ((HU or SB) \& H) OR HST 110: United States Since 1865 (SB \& H) | 3 |  |  |
| 4 MAT 142: College Mathematics (MA) | 3 | C |  |
| ASU 101: The ASU Experience | 1 | C |  |
| Elective | 3 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 2 14-29 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 MTE 180: Mathematics for Elementary Teachers I | 3 | C |  |
| 1. SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| Natural Science - Quantitative (SQ) OR Natural Science - General (SG) | 4 | C |  |
| Global Awareness (G) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 30-45 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| EDT 180: Computer Literacy (CS) OR EDT 321: Computer Literacy (CS) | 3 | C |  |
| 1. MTE 181: Mathematics for Elementary Teachers II | 3 | C |  |
| Natural Science - Quantitative (SQ) OR Natural Science - General (SG) | 4 | C |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Elective | 3 |  |  |
| 1. Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| 4. Maintain 2.50 GPA in Critical Tracking Courses. |  |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| Milestone: Intent to Progress Online Form. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 46-60 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 BLE 220: Foundations of Structured English Immersion | 3 |  | - Must complete 60 credits to progress into PTPP |
| 4 TEL 212: Understanding the Culturally Diverse Child (C) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 | C |  |
| Elective | 3 | C |  |

. Maintain 2.50 GPA in Critical Tracking Courses.
Milestone: DPS Fingerprint Clearance Card.
Milestone: Attend PTPP Enrollment Workshop.
Term hours subtotal: 15

| Term 5 61-76 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| EED 433: Language Method Management and Assessment | 3 | C |  |
| SPE 396: Field Experience I | 1 | Y |  |
| TEL 311: Instruction and Management in the Inclusive Classroom | 3 | C |  |
| TEL 313: Educational Technology in the K-12 Curriculum | 3 | C |  |
| TEL 314: Classroom Assessment | 3 | C |  |
| TEL 315: Child and Adolescent Development (L or SB) | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 77-91 Credit Hours | Hours | Minimum Grade | Notes |
| RDG 322: Language Literacy 1 in Elementary Schools | 3 | C |  |
| SPE 310: Professional Practices and Foundations in Special Education | 3 | C |  |
| SPE 317: Special Education for Culturally and Linguistically Diverse Children and Youth | 3 | C |  |
| SPE 322: Behavior Management and Consultation | 3 | C |  |
| SPE 397: Field Experience II | 1 | Y |  |
| Elective | 2 |  |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 92-105 Credit Hours | Hours | Minimum Grade | Notes |
| SPE 320: Assessment and Evaluation of Children with Special Needs (L) | 3 | C |  |
| SPE 424: Methods of Cross-Categorical Special Education | 3 | C |  |
| SPE 478: Student Teaching in Special Education | 8 | Y |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| EED 412: Mathematics in Elementary Schools | 3 | C |  |
| EED 478: Student Teaching in the Elementary School | 9 |  |  |
| SPE 431: Collaborative Teaching Methods for General Education Classroom Environments | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map <br> Aeronautical Management Technology (Air Transportation Management), BS

College of Technology and Innovation
Campus:Polytechnic WUE
TSAMTMBS

| Term 1 0-13 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 AMT 101: Introduction to Aeronautical Management Technology | 1 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| 4 AMT 182: Private Pilot Ground School | 3 | C |  |
| 4. AMT 220: Aviation Meteorology | 3 | C |  |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Minimum 2.00 GPA in AMT. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 2 14-29 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) | 4 |  | - PGS 101 required pre-requisite for PSY 230 |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| PGS 101: Introduction to Psychology (SB) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| 4 Complete MAT 265 course(s). |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 30-46 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 4 AMT 280: Aerospace Structures, Materials and Systems | 4 | C |  |
| PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) | 4 |  |  |
| AMT 201: Air Traffic Control | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) AND Historical Awareness (H) | 3 |  |  |
| Technical Elective | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 4 47-62 Credit Hours | Hours | Minimum Grade | Notes |
| AMT 287: Aircraft Powerplants | 4 | C |  |
| PSY 230: Introduction to Statistics (CS) | 3 |  |  |
| Complete 2 courses: <br> Technical Elective | 6 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Minimum 2.00 GPA in AMT. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 63-77 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| AMT 308: Air Transportation (G) | 3 | C |  |


| AMT 350: Aircraft Design and Logistics Management | 3 | C |  |
| :---: | :---: | :---: | :---: |
| AMT 442: Aviation Law/Regulations | 3 | C |  |
| OMT 343: Occupational Safety and Ergonomics | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the <br> U.S. (C) OR <br> Upper Division Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) OR <br> Upper Division Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. <br> (C) OR <br> Upper Division Social and Behavioral Sciences (SB) AND Historical Awareness (H) |  |  |  |
|  | Term hours subtotal: 15 |  |  |
| Term 6 78-93 Credit Hours | Hours | Minimum Grade | Notes |
| AMT 330: Managing Financial Resources in Aviation | 3 | C |  |
| AMT 396: Aviation Professional | 1 | C |  |
| AMT 444: Airport Management and Planning | 3 | C |  |
| OMT 452: Industrial Human Resource Management | 3 |  |  |
| TMC 346: Management Dynamics | 3 |  |  |
| Upper Division Technical Elective | 3 |  |  |
|  | Term hours subtotal: 16 |  |  |
| Term 7 94-105 Credit Hours | Hours | Minimum Grade | Notes |
| AMT 408: National Aviation Policy | 3 | C |  |
| AMT 410: Aviation Safety and Human Factors | 3 | C |  |
| OMT 430: Ethical Issues in Technology | 3 |  |  |
| OMT 480: Organizational Effectiveness | 3 |  |  |
|  | Term hours subtotal: 12 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| AMT 484: Internship | 3 | C |  |
| AMT 489: Airline Administration | 3 | C |  |
| AMT 491: Aviation Management Capstone | 3 | C |  |
| OMT 456: Introduction to Organized Labor | 3 |  |  |
| TWC 401: Principles of Technical Communication (L) OR TWC 446: Technical and Scientific Reports (L) | 3 |  |  |
|  | Term hours subtotal: $15$ |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year

## 4 UNIVERSITY

## 2011-2012 Major Map

## Aeronautical Management Technology (Professional Flight),BS

College of Technology and Innovation
Campus:Polytechnic
TSAMTFBS

| Term 1 0-14 Credit Hours Critical course signified by 9 | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: |
| AMT 101: Introduction to Aeronautical Management Technology | 1 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| 4 AMT 182: Private Pilot Ground School | 3 | C |  |
| 4 AMT 220: Aviation Meteorology | 3 | C |  |
| 1. MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| 4 AMT 194: Flight Operations and Safety I | 1 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4. Milestone: Secondary Admission to Professional Status. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-29 Credit Hours Critical course signified by ${ }^{\text {b }}$ | Hours | Minimum Grade | Notes |


| (1. PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) | 4 | C |
| :---: | :---: | :---: |
| AMT 194: Flight Operations and Safety II | 1 | C |
| AMT 214: Commercial/Instrument Ground School I | 3 | C |
| ECN 211: Macroeconomic Principles (SB) OR | 3 |  |

ECN 212: Microeconomic Principles (SB)
ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ..... 3

3ENG 107 or ENG 108

ENG 107 or ENG 108: English for Foreign Students
Complete MAT 265 course(s).
AMT 194: Flight Operations and Safety III $\quad 1 \quad$ C
Complete MAT 265 course(s).
Term hours subtotal:

| Term 3 30-47 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 AMT 280: Aerospace Structures, Materials and Systems | 4 | C |  |
| PHY 112: General Physics (SQ) AND PHY 114: General Physics Laboratory (SQ) | 4 |  |  |
| 4 AMT 294: Flight Operations and Safety IV | 1 | C |  |
| AMT 201: Air Traffic Control | 3 | C |  |
| AMT 322: Commercial/Instrument Ground School II | 3 | C |  |
| AMT 385: Flight Instructor Ground School | 3 | C |  |
| Term hours subtotal: | 18 |  |  |
| Term 4 48-62 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 AMT 294: Flight Operations and Safety V | 1 | C | - AMT 294/250 Flight Operations and Safety VI can be completed in summer. |
| AMT 287: Aircraft Powerplants | 4 | C |  |
| AMT 392: Flight Instructor Instrument Ground School | 3 | C |  |


| AMT 294: Flight Operations and Safety VI | 1 | C |  |
| :---: | :---: | :---: | :---: |
| Term hours subtotal: | 15 |  |  |
| Term 5 63-79 Credit Hours | Hours | Minimum Grade | Notes |
| AMT 394: Flight Operations and Safety VII | 1 | C |  |
| AMT 308: Air Transportation (G) | 3 | C |  |
| AMT 387: Multiengine Pilot Ground School | 1 | C |  |
| AMT 442: Aviation Law/Regulations | 3 | C |  |
| PSY 230: Introduction to Statistics (CS) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) AND Historical Awareness (H) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 6 80-93 Credit Hours | Hours | Minimum Grade | Notes |
| AMT 394: Flight Operations and Safety VIII | 1 | C |  |
| AMT 350: Aircraft Design and Logistics Management | 3 | C |  |
| AMT 382: Air Navigation | 3 | C |  |
| AMT 396: Aviation Professional | 1 | C |  |
| AMT 444: Airport Management and Planning | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) OR Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 7 94-108 Credit Hours | Hours | Minimum Grade | Notes |
| AMT 408: National Aviation Policy | 3 | C |  |
| AMT 410: Aviation Safety and Human Factors | 3 | C |  |
| AMT 482: Airline Instrument Procedures | 3 | C |  |
| AMT 486: Regional Jet Aircraft Systems | 3 | C |  |
| AMT 488: Regional Jet Aircraft Systems II | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 109-120 Credit Hours | Hours | Minimum Grade | Notes |
| AMT 484: Internship | 3 | C |  |
| AMT 489: Airline Administration | 3 | C |  |
| AMT 490: Regional Jet Operations Capstone | 3 | C |  |
| Upper Division TWC course (L) | 3 |  |  |
| Term hours subtotal: | 12 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map

## Agribusiness (Agribusiness Science), BS

College of Technology and Innovation
Campus:Polytechnic
AGAGBPBS

| Term 1 0-14 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1. AGB 100: Introduction to Agribusiness | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Submission of a Current SAT Reasoning score or ACT score (we do not require the writing portion of these tests) by the end of the first semester in the program. <br> - See academic advisor for appropriate Student Success course requirement if not a first-time freshman. |
| BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) OR CHM 113: General Chemistry I (SQ) | 4 | C |  |
| 4 MAT 210: Brief Calculus (MA) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| WPC 101: Student Success in Business | 1 |  |  |
| 4 Milestone: Submission of a Current SAT Reasoning score or ACT score. |  |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |


| Term 2 15-30 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CHM 113: General Chemistry I (SQ) OR CHM 116: General Chemistry II (SQ) OR BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C |  |
| CIS 105: Computer Applications and Information Technology (CS) | 3 | C |  |
| 4 MAT 211: Mathematics for Business Analysis | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| SOC course (SB) | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 31-46 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 4 ACC 231: Uses of Accounting Information I | 3 | C |  |
| CHM 113: General Chemistry I (SQ) OR CHM 116: General Chemistry II (SQ) OR BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| AGB 271: Veterinary Medicine Today | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
|  | Minimum |  |  |


| Term 4 47-63 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4. ACC 241: Uses of Accounting Information II | 3 | C |  |
| CHM 113: General Chemistry I (SQ) OR CHM 116: General Chemistry II (SQ) OR BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) | 4 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| 4 ECN 221: Business Statistics (CS) | 3 | C |  |
| CHM 233: General Organic Chemistry I | 3 | C |  |
| CHM 237: General Organic Chemistry Laboratory I | 1 | C |  |
| Milestone: The business skill courses are critical requirements that must be completed by the end of Term Four: CIS 105, MAT 210, MAT 211, ECN 211, ECN 212, ACC 231, ACC 241, ECN 221. |  |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 5 64-77 Credit Hours | Hours | Minimum Grade | Notes |
| ENG 301: Writing for the Professions (L) OR <br> TWC 347: Written Communication for Managers (L) | 3 |  |  |
| MKT 300: Marketing and Business Performance | 3 | C |  |
| PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) | 4 | C |  |
| WPC 301: Business Forum | 1 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 6 78-90 Credit Hours | Hours | Minimum Grade | Notes |
| AGB 366: Agribusiness Production Technologies | 3 | C |  |
| BIO 340: General Genetics | 4 | C |  |
| FIN 300: Fundamentals of Finance | 3 | C |  |
| MIC 205: Microbiology (SG) | 3 | C |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |
| AGB 367: Agribusiness Processing Technologies | 3 | C |  |
| AGB 3** Elective OR <br> AGB 4** Elective | 3 | C |  |
| BCH 361: Principles of Biochemistry | 3 | C |  |
| LES 305: Legal, Ethical, and Regulatory Issues in Business | 3 | C |  |
| MGT 300: Organization and Management Leadership | 3 | C |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| AGB 302: International Management and Agribusiness (G) OR ECN 306: Survey of International Economics (SB \& G) OR MGT 302: Principles of International Business (G) | 3 | C |  |
| AGB 414: Agribusiness Analysis (L) | 3 | C |  |
| $\text { AGB } 3^{* *} \text { Elective OR }$ AGB 4** Elective | 3 | C |  |
| SCM 300: Global Supply Operations | 3 | C |  |
| Upper Division Cultural Diversity in the U.S. (C) | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Agribusiness (Global Agribusiness), BS

College of Technology and Innovation
Campus:Polytechnic
AGAGBGABS

| Term 1 0-16 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| (1) AGB 100: Introduction to Agribusiness | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Submission of current SAT Reasoning score or ACT score (se do not require the writing portion of these tests) by the end of the first term in the program. <br> - See academic advisor for appropriate Student Success course requirement if not a first-time freshman. |
| 4 CIS 105: Computer Applications and Information Technology (CS) | 3 | C |  |
| 4 MAT 210: Brief Calculus (MA) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| WPC 101: Student Success in Business | 1 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| 4 Milestone: Submission of a Current SAT Reasoning score or ACT score. |  |  |  |
| M Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 2 17-31 Credit Hours Critical course signified by 4. | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| 1 MAT 211: Mathematics for Business Analysis | 3 | C |  |
| COM 100: Introduction to Human Communication (SB) OR <br> COM 225: Public Speaking (L) OR <br> COM 230: Small Group Communication (SB) OR <br> COM 259: Communication in Business and the Professions | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| PGS course (SB) | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3 32-47 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| 1 ACC 231: Uses of Accounting Information I | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| BIO 100: The Living World (SQ) | 4 | C |  |
| SOC course (SB) | 3 |  |  |
| Cultural Diversity in the U.S. (C) | 3 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 48-61 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| 1 ACC 241: Uses of Accounting Information II | 3 | C |  |


| 1. ECN 221: Business Statistics (CS) |  | 3 | C |  |
| :---: | :---: | :---: | :---: | :---: |
| CHM 101: Introductory Chemistry (SQ) |  | 4 | C |  |
| WPC 301: Business Forum |  | 1 | C |  |
| Historical Awareness (H) |  | 3 |  |  |
| Milestone: The business skill courses are critical requiremen the end of Term Four: CIS 105, MAT 210, MAT 211, ECN 21 ACC 241, ECN 221. | ust be completed by 212, ACC 231, |  |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 5 62-76 Credit Hours |  | Hours | Minimum Grade | Notes |
| AGB 302: International Management and Agribusiness OR ECN 306: Survey of International Economics (SB \& G) OR MGT 302: Principles of International Business (G) |  | 3 | C |  |
| AGB 366: Agribusiness Production Technologies |  | 3 | C |  |
| ENG 301: Writing for the Professions (L) OR TWC 347: Written Communication for Managers (L) |  | 3 |  |  |
| FIN 300: Fundamentals of Finance |  | 3 | C |  |
| MKT 300: Marketing and Business Performance |  | 3 | C |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 77-91 Credit Hours |  | Hours | Minimum Grade | Notes |
| AGB 333: Agribusiness Finance II |  | 3 | C |  |
| AGB 367: Agribusiness Processing Technologies |  | 3 | C |  |
| Upper Division Global Agribusiness Elective |  | 3 | C |  |
| LES 305: Legal, Ethical, and Regulatory Issues in Business |  | 3 | C |  |
| MGT 300: Organization and Management Leadership |  | 3 | C |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 92-106 Credit Hours |  | Hours | Minimum Grade | Notes |
| AGB 321: Agribusiness Marketing II |  | 3 | C |  |
| AGB 410: Agribusiness Management II |  | 3 | C |  |
| AGB 435: Agricultural Commodities |  | 3 | C |  |
| Upper Division Global Agribusiness Elective |  | 3 | C |  |
| SCM 300: Global Supply Operations |  | 3 | C |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 8 107-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| AGB 414: Agribusiness Analysis (L) |  | 3 | C |  |
| Complete 2 courses: <br> Upper Division Global Agribusiness Elective |  | 6 | C |  |
| General Education Elective |  | 2 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Minimum 2.00 GPA ASU Cumulative. |  |  |  |  |
|  | Term hours subtotal: | 14 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum Cumulative GPA: 2.00 minimum Total hrs at ASU: 30 minimum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4) ARIZONA State UNIVERSITY

## 2011-2012 Major Map Air Traffic Management, BS

College of Technology and Innovation Campus:Polytechnic
TSATMBS

| Term 1 0-13 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 AMT 101: Introduction to Aeronautical Management Technology | 1 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| 4 AMT 182: Private Pilot Ground School | 3 | C |  |
| 4 AMT 220: Aviation Meteorology | 3 | C |  |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Minimum 2.00 GPA in AMT. |  |  |  |


| Term 2 14-29 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 AMT 201: Air Traffic Control | 3 | C |  |
| PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) | 4 |  |  |
| ECN 211: Macroeconomic Principles (SB) OR <br> ECN 212: Microeconomic Principles (SB) | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| PGS 101: Introduction to Psychology (SB) | 3 |  |  |
| 4 Complete MAT 265 course(s). |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 30-43 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |


| AMT 280: Aerospace Structures, Materials and Systems | 4 | C |
| :--- | :---: | :---: |
| ATC 230: Fundamentals of Air Traffic Management | 3 | C |
| PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) | 4 |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) OR <br> Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |

Complete First-Year Composition requirement.

## Term hours subtotal: 14

| Term 4 44 - 59 Credit Hours Critical course signified by | Hours | Minimum <br> Grade |  |
| :--- | :---: | :---: | :---: |
| ATC 331: Tower Operations | 3 | C |  |
| AMT 287: Aircraft Powerplants | 4 | C |  |
| PSY 230: Introduction to Statistics (CS) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | Term hours subtotal: | 16 |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
|  | Hours | Minimum <br> Grade |  |
| Term 5 60-74 Credit Hours | 3 | C |  |
| AMT 308: Air Transportation (G) | 3 | C |  |
| AMT 350: Aircraft Design and Logistics Management | 3 | Notes |  |


| AMT 442: Aviation Law/Regulations | 3 | C |  |
| :---: | :---: | :---: | :---: |
| ATC 332: TRACON Operations | 3 | C |  |
| ATC 431: Tower Operations and Procedures | 3 | C |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 75-90 Credit Hours | Hours | Minimum Grade | Notes |
| AMT 330: Managing Financial Resources in Aviation | 3 | C | - TMC 346 required for enrollment in OMT 456 |
| AMT 396: Aviation Professional | 1 | C |  |
| AMT 444: Airport Management and Planning | 3 | C |  |
| ATC 432: TRACON Operations and Procedures | 3 | C |  |
| TMC 346: Management Dynamics | 3 |  |  |
| Upper Division Technical Elective | 3 | C |  |
| Term hours subtotal: | 16 |  |  |
| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |
| AMT 408: National Aviation Policy | 3 | C |  |
| AMT 410: Aviation Safety and Human Factors | 3 | C |  |
| ATC 333: En Route Operations | 3 | C |  |
| ATC 484: Internship | 3 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the <br> U.S. (C) OR <br> Upper Division Humanities, Fine Arts and Design (HU) AND Global Awareness (G) OR Upper Division Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. <br> (C) OR <br> Upper Division Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| ATC 433: En Route Operations and Procedures | 3 | C |  |
| ATC 491: Air Traffic Management Capstone | 3 | C |  |
| OMT 456: Introduction to Organized Labor | 3 |  |  |
| TWC 401: Principles of Technical Communication (L) OR TWC 446: Technical and Scientific Reports (L) | 3 |  |  |
| Upper Division Technical Elective | 3 | C |  |
| Term hours subtotal: | 15 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year

## 2011-2012 Major Map Applied Biological Sciences (Applied Biological Sciences),BS

College of Technology and Innovation
Campus:Polytechnic WUE
TSABSABS

| Term 1-15 Credit Hours Critical course signified by |  | Hours | Minimum Grade |
| :---: | :---: | :---: | :---: |
| 1 BIO 181: General Biology I (SQ) |  | 4 | C |
| MAT 210: Brief Calculus (MA) OR MAT 251: Calculus for Life Sciences (MA) |  | 3 | C |
| ASU 101: The ASU Experience |  | 1 |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |
| PHY 101: Introduction to Physics (SQ) OR <br> PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) AND <br> PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) |  | 4 | C |
|  | Term hours subtotal: | 15 |  |

- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses
- ASU Math Placement Exam score determines placement in Mathematics course
- ASU 101 or College specific equivalent First Year Seminar required of all freshman students
- Graduate and medical/dental school track: complete PHY 111/113 and PHY 112/114 instead of PHY 101

| Term 2 16-29 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 BIO 182: General Biology II (SG) | 4 | C | - Graduate and medical/dental school track: complete PHY 111/113 and PHY 112/114 instead of PHY 101. Students on this track should enroll in second physics course in place of elective hours. |
| 1. CHM 113: General Chemistry I (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 Complete MAT 251 course(s). |  |  |  |


| Term 3 3 $30-45$ Credit Hours Critical course signified by | Hours | Minimum <br> Grade |
| :--- | :--- | :--- | :--- |
| STP 420: Introductory Applied Statistics (CS) | 3 | C |
| CHM 116: General Chemistry II (SQ) | 4 | C |
| Literacy and Critical Inquiry (L) | 3 |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) |  |  |
| Elective | 3 |  |
| Complete First-Year Composition requirement. | 3 |  |
| Complete Mathematics (MA) requirement. |  |  |
| Complete CHM 113 course(s). |  |  |
| Complete STP 420, ABS 270 course(s). |  |  |
| Complete BIO 181, BIO 182 course(s). |  |  |



| Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Elective |  | 3 |  |  |
| Complete CHM 116 course(s). |  |  |  |  |
| Complete ABS , BIO course(s). |  |  |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 5 61-74 Credit Hours |  | Hours | Minimum Grade | Notes |
| ABS 370: Ecology |  | 3 | C | - Graduate and medical/dental school track students should complete all of the following: CHM 233 and CHM 237 and CHM 234 and CHM 238 (instead of CHM 231 and CHM 235). Students on this track complete the additional CHM courses in place of elective credit hours. |
| BIO 340: General Genetics |  | 4 | C |  |
| CHM 231: Elementary Organic Chemistry (SQ) AND <br> CHM 235: Elementary Organic Chemistry Laboratory (SQ) OR <br> CHM 233: General Organic Chemistry I AND <br> CHM 237: General Organic Chemistry Laboratory I AND <br> CHM 234: General Organic Chemistry II AND <br> CHM 238: General Organic Chemistry Laboratory II |  | 4 | C |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Social and Behavioral Sciences (SB) |  | 3 |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 6 75-88 Credit Hours |  | Hours | Minimum Grade | Notes |
| ABS 302: Ethical and Policy Issues in Biology |  | 2 | C | - Graduate and medical/dental school track students should complete all of the following: CHM 233 and CHM 237 and CHM 234 and CHM 238 (instead of CHM 231 and CHM 235). Students on this track complete the additional CHM courses in place of elective credit hours. |
| ABS 355: Anatomy and Physiology of Vertebrates |  | 3 | C |  |
| ABS OR BIO OR BCH OR MIC Upper Division Elective |  | 3 | C |  |
| Complete 2 courses: Elective |  | 6 |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 7 89-104 Credit Hours |  | Hours | Minimum Grade | Notes |
| BCH 361: Principles of Biochemistry AND BCH 367: Elementary Biochemistry Laboratory |  | 4 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 16 |  |  |
| Term 8 105-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| ABS 311: Molecular and Cellular Biology OR ABS 498: Applied Plant Physiology OR BIO 360: Animal Physiology |  | 3 | C |  |
| ABS 490: Applied Biological Sciences Seminar |  | 1 | C |  |
| ABS OR BIO OR BCH OR MIC Upper Division Elective |  | 3 | C |  |
| Complete 3 courses: <br> Upper Division Elective |  | 9 |  |  |
|  | Term hours subtotal: | 16 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:
General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Applied Biological Sciences (Secondary Education in Biology),BS

College of Technology and Innovation
Campus:Polytechnic
TSABSSBS

| Term 1 0-17 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 BIO 181: General Biology I (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| MAT 210: Brief Calculus (MA) OR <br> MAT 251: Calculus for Life Sciences (MA) | 3 | C |  |
| ASU 101: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| SPE 222: Orientation to Education of Exceptional Children (SB \& C) | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 2 18-34 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| 1 BIO 182: General Biology II (SG) | 4 | C |  |
| BLE 220: Foundations of Structured English Immersion | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| PHY 101: Introduction to Physics (SQ) | 4 | C |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Milestone: DPS Fingerprint Clearance Card. |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 3 35-47 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| 4 MIC 205: Microbiology (SG) | 3 | C | - Complete BIO 181, BIO 182 anc 6 credits of additional biology related courses |
| 4 MIC 206: Microbiology Laboratory (SG) | 1 | C |  |
| ABS 302: Ethical and Policy Issues in Biology | 2 | C |  |
| ABS 370: Ecology | 3 | C |  |
| CHM 113: General Chemistry I (SQ) | 4 | C |  |
| Milestone: Intent to Progress Online Form. |  |  |  |
| Milestone: Meet with advisor from Education regarding Professional Teacher Preparation Program (PTPP) |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Complete Mathematics (MA) requirement. |  |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 4 48-63 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| 4 ABS 270: Sustainable Biological Systems | 3 | C | - Complete a total of 6 Biology related courses (ABS, BIO, MIC) by the end of term 4 |
| ABS 207: Applied Plant Taxonomy OR <br> ABS 355: Anatomy and Physiology of Vertebrates | 3 | C |  |
| CHM 116: General Chemistry II (SQ) | 4 |  |  |
| STP 420: Introductory Applied Statistics (CS) | 3 | C |  |
| TEL 315: Child and Adolescent Development (L or SB) | 3 | C |  |
| Minimum 2.50 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16 |  |  |


| Term 5 64-77 Credit Hours |  | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: | :---: |
| EDT 321: Computer Literacy (CS) OR Upper Division Elective |  | 3 |  |  |
| SED 321: Critical Issues in Secondary Education (L) |  | 3 | C |  |
| SED 396: Field Experience I |  | 1 | C |  |
| TEL 313: Educational Technology in the K-12 Curriculum |  | 3 | C |  |
| Upper Division Social and Behavioral Sciences (SB) OR Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |
| Lower Division Elective |  | 1 |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 6 78-94 Credit Hours |  | Hours | Minimum Grade | Notes |
| BIO 480: Methods of Teaching Biology |  | 3 | C |  |
| BIO 482: Advanced Methods of Teaching Biology |  | 3 | C |  |
| RDG 323: Literacy Processes in Content Areas |  | 3 | C |  |
| SED 322: Classroom Leadership in Secondary Schools |  | 3 | C |  |
| SED 397: Field Experience II |  | 1 | C |  |
| BIO 340: Fundamentals of Genetics |  | 4 | C |  |
|  | Term hours subtotal: | 17 |  |  |
| Term 7 95-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| ABS 490: Applied Biological Sciences Seminar |  | 1 | C |  |
| BLE 407: SEI for Secondary Students |  | 3 | C |  |
| SPE 417: Inclusion Practices at the Secondary Level |  | 3 | C |  |
| TEL 311: Instruction and Management in the Inclusive Classroom |  | 3 | C |  |
| SED 496: Field Experience III |  | 1 | C |  |
| BIO 360: Animal Physiology OR ABS 498: Applied Plant Physiology OR ABS 311: Molecular and Cellular Biology |  | 3 | C |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| SED 478: Student Teaching in the Secondary School |  | 12 | C |  |
|  | Term hours subtotal: | 12 |  | Secondary Schools can range from 8 to 12 credit hours. Please consult with your Education Advisor. Total degree credits still must equal 120 or more. |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year

## 2011-2012 Major Map

## Applied Biological Sciences (Urban Horticulture), BS

College of Technology and Innovation
Campus:Polytechnic
TSABSUBS

| Term 1 $0-17$ Credit Hours Critical course signified by | Hours | Minimum <br> Grade |
| :--- | :---: | :---: | :---: |
| BIO 181: General Biology I (SQ) | 4 | C |
| MAT 210: Brief Calculus (MA) OR <br> MAT 251: Calculus for Life Sciences (MA) | 3 | C |
| ASU 101: The ASU Experience | 1 |  |
| ENG 101 or ENG 102: First-Year Composition OR | 3 | C |
| ENG 105: Advanced First-Year Composition OR |  |  |
| ENG 107 or ENG 108: English for Foreign Students | 3 |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |


| Term 2 18-31 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 1. BIO 182: General Biology II (SG) |  | 4 | C |  |
| 1. CHM 101: Introductory Chemistry (SQ) |  | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students |  | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) |  | 3 |  |  |
| 4 Complete CHM 101 course(s). |  |  |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 3 32-45 Credit Hours Critical course signified by |  | Hours | Minimum Grade | Notes |
| 1 ABS 260: Fundamentals of Urban Horticulture (SG) |  | 4 | C |  |
| ABS 225: Soils (SQ) |  | 3 | C |  |
| ABS 226: Soils Laboratory (SQ) |  | 1 | C |  |
| Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
| Elective |  | 3 |  |  |
| 4. Complete First-Year Composition requirement. |  |  |  |  |
| 4 Complete Mathematics (MA) requirement. |  |  |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 4 46-58 Credit Hours Critical course signified by 4 |  | Hours | Minimum Grade | Notes |
| 4 ABS 270: Sustainable Biological Systems |  | 3 | C | - Additional 3 hours of ABS or |
| ABS 362: Landscape Plants and Design |  | 4 | C | BIO (not including BIO 181 and |
| CHM 231: Elementary Organic Chemistry (SQ) |  | 3 | C | 182) |
| Upper Division Elective |  | 3 |  |  |
| 4 Complete ABS , BIO course(s). |  |  |  |  |
| 4 Complete ABS 260, ABS 270 course(s). |  |  |  |  |
|  | Term hours subtotal: | 13 |  |  |
| Term 5 59-75 Credit Hours |  | Hours | Minimum Grade | Notes |
| ABS 363: Landscape and Turf Irrigation |  | 4 | C |  |



Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

 Applied Biological Sciences (Wildlife \& Restoration Ecology), BSCollege of Technology and Innovation
Campus:Polytechnic
TSABSRBS

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 BIO 181: General Biology I (SQ) | 4 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| MAT 210: Brief Calculus (MA) OR <br> MAT 251: Calculus for Life Sciences (MA) | 3 | C |  |
| ASU 101: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-28 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| 4 BIO 182: General Biology II (SG) | 4 | C |  |
| 4. CHM 113: General Chemistry I (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 29-45 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 4 ABS 274: Introduction to Wildlife Management | 4 | C |  |
| 4 CHM 116: General Chemistry II (SQ) | 4 | C |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Elective | 3 |  |  |
| Complete First-Year Composition requirement. |  |  |  |


| Term 4 46-60 Credit Hours Critical course signified by ${ }^{(1)}$ |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 1 ABS 270: Sustainable Biological Systems |  | 3 | C | - Additional 3 hours of ABS or BIO (not including BIO 181 and 182) <br> - CHM 113 and CHM 116 are required pre-requisites for CHM 231 |
| ABS 207: Applied Plant Taxonomy |  | 3 | C |  |
| CHM 231: Elementary Organic Chemistry (SQ) |  | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) |  | 3 |  |  |
| Wildlife \& Restoration Ecology Elective |  | 3 | C |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 5 61-75 Credit Hours |  | Hours | Minimum Grade | Notes |


| ABS 302: Ethical and Policy Issues in Biology | 2 |
| :--- | :--- |
| ABS 370: Ecology | 3 |
| ABS 381: Natural Resources Policy | 3 |


ABS 481: Riparian and Wetland Restoration
ABS 482: Ecology and Planning for
Restoration
ABS 483: Restoration Planning Practicum
ABS 486: Introduction to Remote Sensing
BIO 331: Animal Behavior
BIO 385: Comparative Invertebrate Zoology
BIO 410: Techniques in Wildlife
Conservation Biology (L)
BIO 426: Limnology (L)
BIO 473: Ichthyology
BIO 474: Herpetology

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011－2012 Major Map Applied Computer Science，BS

College of Technology and Innovation
Campus：Polytechnic WU⿴囗十⺝⿱一土儿，
TSACSBS


| Term 2 14－29 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CST 150：Digital Systems（CS） | 3 | C | －Students can take PHY 111／113 for this major but it will not satisfy BSE Engineering degree requirements |
| 4 EGR 102：Introduction to Engineering Design II | 3 | C |  |
| 4 MAT 266：Calculus for Engineers II（MA） | 3 | C |  |
| PHY 121：University Physics I：Mechanics（SQ）AND PHY 122：University Physics Laboratory I（SQ） | 4 | C |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students | 3 | C |  |
| 4 Complete MAT 265 course（s）． |  |  |  |
| Term hours subtotal： | 16 |  |  |
| Term 3 30－45 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| 4 CST 220：Programming Languages for Technology with C／C＋＋and Scripting | 3 | C |  |
| 4 CHM 113：General Chemistry I（SQ） | 4 | C |  |
| 1. EGR 280：Engineering Statistics（CS） | 3 | C |  |
| 4 MAT 243：Discrete Mathematical Structures | 3 | C |  |
| 4 MAT 267：Calculus for Engineers III（MA） | 3 | C |  |
| 4 Complete First－Year Composition requirement． |  |  |  |

Term hours subtotal： 16

| Term 4 46－61 Credit Hours Critical course signified by ${ }^{\text {－}}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 CST 230：Applied Data Structures | 3 | C | －ECN 211 or ECN 212 recommended business exposure course |
| CST 250：Microcomputer Architecture and Programming AND CST 251：Microcomputer Architecture and Programming Laboratory | 4 | C |  |
| ECN 211：Macroeconomic Principles（SB）OR ECN 212：Microeconomic Principles（SB） | 3 |  |  |
| Social and Behavioral Sciences（SB）AND Historical Awareness（H）OR Humanities，Fine Arts and Design（HU）AND Historical Awareness（H） | 3 |  |  |
| Humanities，Fine Arts and Design（HU）AND Cultural Diversity in the U．S．（C） | 3 |  |  |


| Term 5 62-76 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CST 315: Software Enterprise I: Tools and Process | 3 |  |  |
| CST 359: Internet Networking Protocol | 3 |  |  |
| CST 433: Database Technology | 3 |  |  |
| MAT 275: Modern Differential Equations (MA) | 3 |  |  |
| CST 4** Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 77-91 Credit Hours | Hours | Minimum Grade | Notes |
| CST 316: Software Enterprise II: Construction and Transition | 3 |  |  |
| CST 335: Applications of Computer Theory | 3 |  |  |
| CST 386: Operating Systems Principles | 3 |  |  |
| MAT 343: Applied Linear Algebra | 3 |  |  |
| TWC 401: Principles of Technical Communication (L) OR TWC 446: Technical and Scientific Reports (L) OR Literacy and Critical Inquiry (L) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 92-105 Credit Hours | Hours | Minimum Grade | Notes |
| CST 415: Software Enterprise III: Inception and Elaboration (L) | 3 |  |  |
| CST 420: Foundations of Distributed Web-Based Applications in Java | 3 |  |  |
| CST 496: Ethics and Professionalism in Computing | 1 |  |  |
| Mathematics (MA) OR <br> Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 3 |  |  |
| CST 4** Elective | 3 |  |  |
| Elective | 1 |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| CST 416: Software Enterprise IV: Project and Process Management | 3 |  |  |
| CST 4** Elective | 6 |  |  |
| HST 318: History of Engineering ((L or SB) \& G) OR Upper Division Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| Technical Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |

## Technical Electives

Upper Division CST
Upper Division EST
Upper Division UET

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011－2012 Major Map Applied Psychology，BS

College of Technology and Innovation
Campus：Polytechnic WU⿴囗十心
ECPSYBS

| Term 1 0－13 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4. PGS 101：Introduction to Psychology（SB） | 3 | C | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> －ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| ASU 101：The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students | 3 | C |  |
| MAT 170：Precalculus（MA） | 3 | C |  |
| Elective | 3 |  |  |
| Maintain 2．00 GPA in Major Courses． |  |  |  |
| Term hours subtotal： | 13 |  |  |
| Term 2 14－29 Credit Hours Critical course signified by ${ }^{\text {－}}$ | Hours | Minimum Grade | Notes |
| BIO 100：The Living World（SQ）OR <br> BIO 181：General Biology I（SQ）OR <br> BIO 182：General Biology II（SG）OR <br> BIO 201：Human Anatomy and Physiology I（SG）OR <br> BIO 202：Human Anatomy and Physiology II（SG） | 4 |  |  |
| 4. PSY 230：Introduction to Statistics（CS） | 3 | C |  |
| MAT 251：Calculus for Life Sciences（MA） | 3 | C |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students | 3 | C |  |
| Elective | 3 |  |  |
| 4 Complete MAT 170 course（s）． |  |  |  |
| 4 Complete BIO course（s）． |  |  |  |
| Term hours subtotal： | 16 |  |  |
| Term 3 30－45 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 1 PSY 290：Research Methods（L or SG） | 4 | C |  |
| Humanities，Fine Arts and Design（HU）AND Historical Awareness（H） | 3 |  |  |
| Natural Science－Quantitative（SQ）OR <br> Natural Science－General（SG） | 4 |  |  |
| Complete 2 courses： Elective | 5 |  |  |
| 1. Complete First－Year Composition requirement． |  |  |  |
| 4 Complete MAT 251 course（s）． |  |  |  |
| 4 Complete PSY 230 course（s）． |  |  |  |
| Term hours subtotal： | 16 |  |  |
| Term 4 46－60 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum | Notes |

CIS 220：Programming Concepts for Accountancy Majors OR
CSE 100：Principles of Programming with C＋＋（CS）OR
CSE 110：Principles of Programming with Java（CS）OR 3
CSE 120：Digital Design Fundamentals OR
CSE 180：Computer Literacy（CS）OR
CST 100：Object－Oriented Software Development I
Humanities，Fine Arts and Design（HU）AND Cultural Diversity in the U．S．（C） 3
Social and Behavioral Sciences（SB）AND Global Awareness（G）OR
Complete 2 courses:
Elective
Complete PSY 290 course(s).

Term hours subtotal: 15

| Term 5 61-75 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| Complete 2 courses: <br> PSY 323: Sensation and Perception OR PSY 324: Memory and Cognition OR PSY 330: Statistical Methods (CS) OR PGS 350: Social Psychology (SB) | 6 | C |  |
| PSY 437: Human Factors (L) | 3 | C |  |
| Elective | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 76-90 Credit Hours | Hours | Minimum Grade | Notes |
| Complete 2 courses: <br> PSY 323: Sensation and Perception OR PSY 324: Memory and Cognition OR PSY 330: Statistical Methods (CS) OR PGS 350: Social Psychology (SB) | 6 | C |  |
| Additional Skills Area |  |  |  |
| AMT OR BIO OR CIS OR CSE OR EXW OR MGT OR TWC Elective | 3 |  |  |
| ENG 301: Writing for the Professions (L) OR Upper Division Elective AND Upper Division TWC course (L) | 3 | C |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 91-105 Credit Hours | Hours | Minimum Grade | Notes |

Complete 2 courses:
PGS 304: Effective Thinking (L) OR
PGS 471: Psychological Testing OR
PSY 320: Learning and Motivation OR
PSY 325: Physiological Psychology OR
PSY 360: Cognitive Science OR
PSY 390: Experimental Psychology (L) OR
PSY 438: Human-Computer Interaction OR
PSY 439: Training and Skill Acquisition OR
PSY 440: Industrial/Organizational Psychology OR
PSY 448: Human Factors in Transportation OR
PSY 449: Human Factors in Sport OR
PSY 494: Special Topics
Additional Skills Area

| AMT OR BIO OR CIS OR CSE OR EXW OR MGT OR TWC Elective | 3 |
| :--- | :---: |
| Upper Division Elective | 3 |
| Elective |  |


| Term 8 | $106-120$ Credit Hours | Hours | Minimum <br> Grade |
| :---: | :---: | :---: | :---: |
| PSY 477: Applied Psychology Capstone Experience | 3 | C |  |

## Complete 2 courses:

PGS 304: Effective Thinking (L) OR
PGS 471: Psychological Testing OR
PSY 320: Learning and Motivation OR
PSY 325: Physiological Psychology OR
PSY 360: Cognitive Science OR
PSY 390: Experimental Psychology (L) OR $\quad 6$
PSY 438: Human-Computer Interaction OR
PSY 439: Training and Skill Acquisition OR
PSY 440: Industrial/Organizational Psychology OR
PSY 448: Human Factors in Transportation OR
PSY 449: Human Factors in Sport OR
PSY 494: Special Topics

| Upper Division Elective | 3 |  |
| :--- | :---: | :---: |
| Elective |  | 3 |
|  | Term hours subtotal: | 15 |


| Total Hours: 120 | General University Requirements Legend | General Studies Awareness Requirements: |
| :--- | :--- | :--- |
| Upper Division Hours: 45 minimum | General Studies Core Requirements: | • Cultural Diversity in the U.S. (C) |
| Major GPA: 2.00 minimum | - Literacy and Critical Inquiry (L) | • Global Awareness (G) |
| Cumulative GPA: 2.00 minimum | - Mathematical Studies (MA) | • Historical Awareness (H) |
| Total hrs at ASU: 30 minimum | - Computer/Statistics/Quantitative Applications |  |
| Hrs Resident Credit for | (CS) | First-Year Composition |
| Academic Recognition: 56 minimum | - Humanities, Fine Arts and Design (HU) |  |
| Total Community College Hrs: 64 maximum | - Social and Behavioral Sciences (SB) |  |
|  | - Natural Science - Quantitative (SQ) |  |
|  | - Natural Science - General (SG) |  |

General Studies designations listed on the major map are current for the 2011-2012 academic year.

The B.A.S. program is a transfer pathway specifically for students who have earned community college Associate of Applied Science (A.A.S.) degrees. The goal of the program is to provide students with management, leadership, critical thinking, and communication skills, along with significant work in a professional specialization. Students must have completed an Associate of Applied Science (A.A.S.) degree to be eligible for this program. AA and AS students are not eligible for this program.

## Program Requirements

Students complete a relevant A.A.S. through a community college and transfer 60 lower division credit hours. The BAS is a 60 credit hour upper division program divided into four categories.

General Studies Completion Curriculum (19 semester hours):
The BAS curriculum builds on the general education content of the AAS. ASU general studies requirements will be completed with courses in these areas through upper division coursework:

| Mathematical Studies (MA) | 3 credit hours |
| :--- | :--- |
| Lab Science (SQ) | 4 credit hours |
| Literacy \& Critical Inquiry (L) | 3 credit hours |
| Humanities, Fine Arts, and Design (HU) | 3 credit hours |
| Social and Behavioral Sciences (SB) | 3 credit hours |
| One additional HU or SB | 3 credit hours |

Additionally, students must complete the general studies awareness requirements either through previously taken transfer work or by combining with the general studies requirements from above (L, HU, SB):
$\begin{array}{ll}\text { Cultural Diversity in the US (C) } & 3 \text { credit hours } \\ \text { Global Awareness (G) } & 3 \text { credit hours } \\ \text { Historical Awareness (H) } & 3 \text { credit hours }\end{array}$
In consultation with an advisor, students select courses from the ASU general studies list that contribute to the overall curriculum and meet degree requirements.

## B.A.S. Core Curriculum ( 15 semester hours minimum):

The BAS core curriculum is focused on management and organization, professional communication, statistical processes, and computer competency. These are a set standard of courses required by the selected concentration.

## Concentrations (20 semester hours minimum):

20 semester hours of specialization courses

## Assignable Credit (6 semester hours):

These are traditional electives selected in consultation with an advisor to enhance the curriculum. Assignable credit also can be used to strengthen math/science capabilities or computer skills.

Graduation Requirements Summary:

| Total Hours (120) | Total Upper Division <br> Hours (minimum 60) | Cumulative GPA <br> $(2.00$ minimum) | Major GPA <br> $(2.0$ minimum) | Total Hours at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | Community College <br> hours (maximum 60) |  |  |

Additional Notes:

## 2011-2012 Curriculum Check Sheet

## College of Technology and Innovation

| Student Name | ID. Number |
| :---: | :---: |
| A.A.S. Degree | Date A.A.S. Degree Granted |
| A.A.S. Degree Granting Institution | ASU Catalog Year _ 2011-2012 |
| B.A.S. Academic Department | Advisor |
| Number of Upper Division Transfer Credits | Expected Graduation Date |
| Institution of Transfer Course Work (Upper Division Only) |  |

## General Studies Sequence (19 Hours)

| upper division only | ASU | Transfer | Transfer From | Grade |
| :--- | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |
| Science - ASC 325 | 4 |  |  |  |
| Literacy [L] | 3 |  |  |  |
| Humanities [HU] | 3 |  |  |  |
| Social\& Behavioral Science [SB] | 3 |  |  |  |
| Humanities [HU] or Social Behavioral Science [SB] | 3 |  |  |  |
| Awareness Areas (all three): [C] [G] [H] |  |  |  |  |

(Suggested courses are tinted) Sub Total 19 Hrs.
B.A.S. Area Core (15 Hours)

| ASU |  |  |  |  |  |  |  | Transfer | Transfer From | Grade |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TMC 346 Management Dynamics 3   <br> TWC 400 Technical Communications 3   <br> STP 420 Introductory Applied Statistics [CS] 3   <br> GIT 335 Computer Systems Technology 3   <br> TMC 470 Project Management 3   |  |  |  |  |  |  |  |  |  |  |

BAS Degree Credit Summary

| Summary | Hours |
| :--- | :---: |
| A.A.S. Degree Block | 60 |
| General Studies |  |
| B.A.S. Area Core |  |
| Digital Media Management |  |
| Assignable Credits |  |

Total (120 Hours Minimum)

## Advisor Comments

$\qquad$
Sub Total 15 Hrs.
Aviation Management Technology (20 Hours)

| upper division only | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| AMT 308 Air Transportation | 3 |  |  |  |
| AMT 396 The Aviation Professional | 1 |  |  |  |
| AMT 408 National Aviation Policy | 3 |  |  |  |
| AMT 410 Aviation Safety \& Human Factors | 3 |  |  |  |
| AMT 442 Aviation Law \& Regulations | 3 |  |  |  |
| AMT 491 Aviation Management Captsone | 3 |  |  |  |
| AMT xxxTechnical Elective (Upper Div.) | 4 |  |  |  |

Sub Total 20 Hrs.

|  | ASU | Transfer | Transfer From | Grade |
| :--- | :---: | :---: | :---: | :---: |
|  | 3 |  |  |  |
|  | 3 |  |  |  |

Sub Total 6 Hrs.

Total Upper Division Hours

Total ASU Resident Hours $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$


## Bachelor of Applied Science Degree

POLYTECHNIC CAMPUS
Electronic and Energy Systems
2011-2012 Curriculum Check Sheet
College of Technology and Innovation


## General Studies Sequence (19 Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |
| Science - ASC 325 | 4 |  |  |  |
| Literacy [L] | 3 |  |  |  |
| Humanities [HU] | 3 |  |  |  |
| Social Science [SB] | 3 |  |  |  |
| General Studies [HU or SB] | 3 |  |  |  |
| [H] [G] [C] |  |  |  |  |

(Suggested courses are tinted) Sub Total 19 Hrs.

| BAS Degree |
| :--- |
| BA <br> Summary <br> Hours |
| A.A.S. Degree Block Transfer 60 <br> General Studies  <br> B.A.S. Area Core  <br> Concentration  <br> Assignable Credits  <br> Total (120 Hours Minimum)  |

## B.A.S. Area Core ( $\mathbf{1 5}$ Hours)

| ASU |  |  |  |  |  |  |  | Transfer |  | Transfer From |  | Grade |
| :--- | :---: | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TMC 346 Management Dynamics | 3 |  |  |  |  |  |  |  |  |  |  |  |
| UET 331 Electronic Material | 3 |  |  |  |  |  |  |  |  |  |  |  |
| TWC 446 Technical Report Writing [L] | 3 |  |  |  |  |  |  |  |  |  |  |  |
| EST 345 Project Planning \& Delivery | 3 |  |  |  |  |  |  |  |  |  |  |  |
| EST 494/465: Statistical Process Control | 3 |  |  |  |  |  |  |  |  |  |  |  |

Sub Total 15 Hrs.

## Advisor Comments

All ASU course work must be 300 or 400 level.

## Concentration (20 Hours)

| ASU |  | Transfer | Transfer From |  |
| :--- | :--- | :--- | :--- | :--- |
| See page 2 |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Sub Total 20 Hrs.

## Assignable Credits (6 Hours)

| ASU |  |  |  | Transfer |  | Transfer From | Grade |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| STP 420 Intro to Statistics [CS] | 3 |  |  |  |  |  |  |
|  | 3 |  |  |  |  |  |  |

Total Upper Division Hours $\qquad$

Total ASU Resident Hours $\qquad$

Student Signature

## BAS Electronic and Energy Systems Concentration emphasis areas courses

## Alternative Energy Concentration

| ALT 420 | Electrochemical Energy |
| :--- | :--- |
| ALT 435 Applied Photovoltaic's | Fall |
| ALT 360 | Renewable Energy Technologies |
| ALT 401 | Hydrogen Generation, Storage \& Distribution |
| ALT 405 | Power Conditioning |
| Spring - Jr |  |
| ALT 445 Automotive \& Stationary FCS | Spring |
| Spring |  |

Upper division Technical Electives as necessary to complete concentration or assignable credits

## Basic Electronics Option

EST 394 (350) Advanced Microcontrollers Fall
EST 370 Sensors Fall
EET 430 Instrumentation Systems Fall
EST 372 Wireless Comm Systems Spring
EST 380 Electronic Devices Spring
EET 460 Power Electronics/ALT 405 Spring
MET 351 Introduction to Automation Spring-Jr
Select from the list above to complete concentration and assignable credits

## Integrated Electronic Systems

UET 411 Layer Deposition Technology Fall 09, 11, 13, 15
UET 416 Dopant Control Technology
UET 417 Semiconductor Technology Practice
Fall 08, 10, 12, 14
UET 418 Systems on Silicon
every Fall
UET 424 Pattern Transfer Technology
Spring 10, 12, 14 - Jr
UET 432 Semiconductor Packaging \& Heat Transfer
Spring 09, 11, 13, 15
Upper division Technical Electives as necessary to complete concentration or assignable credits

BAS- Applied Science (Emergency Management)

## Arizona State University

## 2011-2012 Curriculum Check Sheet

## College of Technology and Innovation

| Student Name | ID. Number |
| :---: | :---: |
| A.A.S. Degree | Date A.A.S. Degree Granted |
| A.A.S. Degree Granting Institution | ASU Catalog Year 2011-2012 |
| B.A.S. Academic Department | Advisor |
| Number of Upper Division Transfer Credits | Expected Graduation Date |
| Institution of Transfer Course Work (Upper Division Only) |  |

## General Studies Sequence (19 Hours)

| upper division only | ASU | Transfer | Transfer From | Grade |
| :--- | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |
| Science - ASC 325 | 4 |  |  |  |
| Literacy [L] | 3 |  |  |  |
| Humanities [HU] | 3 |  |  |  |
| Social\& Behavioral Science [SB] | 3 |  |  |  |
| Humanities [HU] or Social Behavioral Science [SB] | 3 |  |  |  |
| Awareness Areas (all three): [C] [G] [H] |  |  |  |  |

(Suggested courses are tinted) Sub Total 19 Hrs.

## B.A.S. Area Core ( $\mathbf{1 5}$ Hours)

| upper division only | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| TMC 346 Management Dynamics | 3 |  |  |  |
| OMT 452 Ind. Human Resource Management | 3 |  |  |  |
| TWC 400 Technical Communications [L] | 3 |  |  |  |
| STP 420: Introductory Applied Statistics (CS) | 3 |  |  |  |
| GIT 335 Computer Systems Technology | 3 |  |  |  |


| BAS Degree |
| :--- |
| Summary |


| Credit <br> Hours |  |
| :--- | :---: |
| A.A.S. Degree Block Transfer | 60 |
| General Studies |  |
| B.A.S. Area Core |  |
| Emergency Management |  |
| Assignable Credits |  |

Total (120 Hours Minimum)

## Advisor Comments

Sub Total 15 Hrs.

## Emergency Management (20 Hours)

| upper division only | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| ETM 301 Environmental Management | 3 |  |  |  |
| ETM 360 Introduction to Emergency Management | 3 |  |  |  |
| ETM 362 Managing Natural \& Technological Disasters | 3 |  |  |  |
| ETM /FSM 363 Computer Applications in Emerg.Mgt. | 3 |  |  |  |
| ETM 364 Toxicology \& Biohazards for Emerg. Mgt. | 3 |  |  |  |
| ETM/FSM 460 Incident Mgt Sys\&Emerg Oper Center | 3 |  |  |  |
| TMC 494 BAS Senior Project | 2 |  |  |  |

Sub Total 20 Hrs.
Assignable Credits (6 Hours)

| upper division only | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| ETM 461 Homeland Security | 3 |  |  |  |
| ETM 468 Simulators and Exercising | 3 |  |  |  |

Sub Total 6 Hrs.

| Name： | ASU ID： |
| :---: | :---: |
| AAS Degree： | AAS degree date： |
| AAS Institution： | Catalog year： |
| BAS Department： | Advisor： <br> Expected Graduation Semester： |
| Number of upper division transfer credits： |  |
| Institution of transfer work（upper division only）： |  |


| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper | Transfer Course／Grade | Minimum Grade if Required | Additional Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GENERAL STUDIES SEQUENCE： 19 CREDIT HOURS |  |  |  |  |  |
| ASC 315：Numeracy in Technology（MA）or MA | 3 | $\square$ |  |  | Students must also satisfy general studies awareness areas either through completed transfer work or by sharing with L，HU，or SB courses at ASU： <br> －Cultural Diversity in the U．S．（C） <br> Global Awareness（G） <br> Historical Awareness（H） |
| ASC 325：Physical Sciences in Technology（SQ）or SQ | 4 | $\square$ |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | マ |  |  |  |
| Humanities，Fine Arts，and Design（HU） | 3 | $\square$ |  |  |  |
| Social and Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts，and Design（HU）OR Social and Behavioral Sciences（SB） | 3 | 凹 |  |  |  |
| BAS CORE： 15 CREDIT HOURS |  |  |  |  |  |
| STP 420：Introductory Applied Statistics（CS）OR ABS 350：Applied Statistics | 3 | 凹 |  |  |  |
| TWC 3＊＊or 4＊＊Upper Division Literacy（L） | 3 | 区 |  |  |  |
| TMC 346：Management Dynamics | 3 | 囚 |  |  |  |
| TMC 470：Project Management | 3 | 区 |  |  |  |
| GIT 335：Computer Systems Technology | 3 | 区 |  |  |  |
| CONCENTRATION： 21 CREDIT HOURS |  |  |  |  |  |
| GIT 314：Multimedia Design，Planning Storyboards OR GIT 337：Web Content Design | 3 | 区 |  |  | －Students should take GIT 314 if they have not yet taken GIT 337 （or GIT 237）． |
| GIT 334：Image Capture and Manipulation | 3 | 区 |  |  |  |
| GIT 414：Web Site Design and Internet／Web Technologies | 3 | 囚 |  |  |  |
| GIT 417：Advanced Internet Programming | 3 | 区 |  |  |  |
| GIT 418：Multimedia Authoring Script Production （pre－requisite：GIT 417） | 3 | ® |  |  |  |
| GIT 435：Web Management \＆E－Commerce （pre－requisite：GIT 414） | 3 | 凹 |  |  |  |
| GIT 494 ／GIT 480：Senior Project（final semester） | 3 | 区 |  |  |  |
| ASSIGNABLE CREDITS： 6 CREDIT HOURS |  |  |  |  |  |
|  | 3 | 区 |  |  | －Consult with your advisor on assignable credit course selections |
|  | 2 | 囚 |  |  |  |

## Graduation Requirements Summary：

BAS students must complete a minimum of 60 hours at a 4 －year institution（a minimum of 30 of those 60 hours must be completed at ASU）and a minimum of 45 hours of upper division（ $300 / 400$ level coursework）．

| Total Hours <br> $(120$ minimum $)$ | Total Hrs at ASU <br> （30 minimum） | Hrs Resident Credit for <br> Academic Recognition <br> （56 minimum） | Major GPA <br> $(2.000$ Min．$)$ | Total UD Hrs <br> $(45$ minimum $)$ | Total Comm．College <br> Hrs．（60 maximum） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
Literacy and Critical Inquiry（L）
－Mathematical Studies（MA）
－Computer／Statistics／Quantitative applications（CS）
－Humanities，Fine Arts，and Design（HU）
－Social and Behavioral Sciences（SB）
－Natural Science－Quantitative（SQ）
－Natural Science－General（SG）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）
－Global Awareness（G）
－Historical Awareness（H）
－First－Year Composition

BAS- Manufacturing Technology and Management
POLYTECHNIC CAMPUS
2011-2012 Curriculum Check Sheet
College of Technology \& Innovation

| Student Name | ID. Number |
| :---: | :---: |
| A.A.S. Degree | Date A.A.S. Degree Granted |
| A.A.S. Degree Granting Institution | __ ASU Catalog Year 2011-2012 |
| B.A.S. Academic Department Engineering Technology Advisor |  |
| Number of Upper Division Transfer Credits | Expected Graduation Date |
| Institution of Transfer Course Work (Upper Division Only) |  |

## General Studies Sequence (19 Hours)

upper division only

| Numeracy - ASC 315 | ASU | Transfer | Transfer From | Grade |
| :--- | :---: | :---: | :---: | :---: |
| Science - ASC 325 | 3 |  |  |  |
| Literacy [L] | 4 |  |  |  |
| Humanities [HU] | 3 |  |  |  |
| Social\& Behavioral Science [SB] | 3 |  |  |  |
| Humanities [HU] or Social Behavioral Science [SB] | 3 |  |  |  |
| Awareness Areas (all three): [C] [G] [H] |  |  |  |  |

(Suggested courses are tinted) Sub Total 19 Hrs.

## B.A.S. Area Core (15 Hours)

| upper division only | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| OMT 344 Industrial Organization (TMC 346) | 3 |  |  |  |
| TWC 446 Technical Report Writing | 3 |  |  |  |
| MET 401 Statistical Process Control | 3 |  |  |  |
| MET 416 Applied Computer Int. Mfg. | 3 |  |  |  |
| OMT 470 Project Management | 3 |  |  |  |


| BAS Degree <br> Summary |
| :--- |
| Credit <br> Hours  <br> A.A.S. Degree Block Transfer 60 <br> General Studies  <br> B.A.S. Area Core  <br> Manufacturing Technology  <br> Assignable Credits  |

Total (120 Hours Minimum)

## Advisor Comments

Sub Total 15 Hrs.

## Manufacturing Technology (20 Hours)

| upper division only | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| MET 300 Applied Material Science | 3 |  |  |  |
| MET 302 Welding Survey | 3 |  |  |  |
| MET 309 Non-destructive Testing \& Measurement | 1 |  |  |  |
| MET 341 Manufacturing Analysis | 3 |  |  |  |
| MET 344 Casting \& Form Processes | 3 |  |  |  |
| MET 345 Advanced Mfg. Processes | 3 |  |  |  |
| MET 396 Mfg. Professional Orientation | 1 |  |  |  |
| MET 444 Production Tooling | 3 |  |  |  |

Sub Total 20 Hrs.

## Total Upper Division Hours

$\qquad$
Assignable Credits (6 Hours)

| ASU |  |  |  |  |  |  |  | Transfer |  | Transfer From |  | Grade |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| STP 420 | 3 |  |  |  |  |  |  |  |  |  |  |  |
| MET 351 (suggested) | 3 |  |  |  |  |  |  |  |  |  |  |  |

Total ASU Resident Hours $\qquad$

Sub Total 6 Hrs.

## Bachelor of Applied Science Degree

2011-2012 Curriculum Check Sheet
College of Technology and Innovation

| Student Name | ID. Number |
| :---: | :---: |
| A.A.S. Degree | Date A.A.S. Degree Granted |
| A.A.S. Degree Granting Institution | ASU Catalog Year 2011-2012 |
| Number of Upper Division Transfer Credits | Expected Graduation Date |
| Institution of Transfer Course Work (Upper Division Only) |  |

## General Studies Sequence (19 Hours)

| ASU Transfer Transfer From Grade |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |  |  |  |
| Science - ASC 325 | 4 |  |  |  |  |  |  |
| Literacy [L] | 3 |  |  |  |  |  |  |
| Humanities [HU] | 3 |  |  |  |  |  |  |
| Social Behavioral Science [SB] | 3 |  |  |  |  |  |  |
| Humanities [HU] or Social Behavioral Science [SB] | 3 |  |  |  |  |  |  |
| Awareness Areas (all three): [C] [G] [H] |  |  |  |  |  |  |  |

(Suggested courses are tinted) Sub Total 19 Hrs .

| BAS Degree Summary | Credit Hours |
| :---: | :---: |
| A.A.S. Degree Block Transfer | 60 |
| General Studies |  |
| B.A.S.Area Core |  |
| Operations M anagement |  |
| Assignable Credits |  |

## B.A.S. Area Core (15 Hours)

| ASU Transfer Transfer From Grade |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| TMC 346 Management Dynamics | 3 |  |  |  |  |
| OMT 452 Ind. Human Resource Management | 3 |  |  |  |  |
| TWC 3** or 4** Upper Division Literacy [L] | 3 |  |  |  |  |
| STP 420: Introductory Applied Statistics [CS] | 3 |  |  |  |  |
| GIT 335 Computer Systems Technology | 3 |  |  |  |  |

$$
\text { Sub Total } 15 \text { Hrs. }
$$

## Operations Management ( 20 Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| TMC 331 Quality Assurance | 3 |  |  |  |
| OMT 343 Occupational Safety and Ergonomics | 3 |  |  |  |
| OMT 430 Ethical Issues in Technology | 3 |  |  |  |
| OMT 461 Operations Management | 3 |  |  |  |
| OMT 3** or 4** Upper Division | 3 |  |  |  |
| TMC 470 Project Management | 3 |  |  |  |
| TMC 494 BAS Senior Project | 2 |  |  |  |

Advisor Comments
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Total Upper Division Hours

$\qquad$

## Assignable Credits (6 Hours)



Sub Total 6 Hrs.

Total ASU Resident Hours $\qquad$


## Bachelor of Applied Science Degree

2010-2011 Curriculum Check Sheet
College of Technology and Innovation

| Student Name | ID. Number |
| :---: | :---: |
| A.A.S. Degree | Date A.A.S. Degree Granted |
| A.A.S. Degree Granting Institution | ASU Catalog Year _ 2010-2011 |
| B.A.S. Academic Department Engineering | Advisor |
| Number of Upper Division Transfer Credits | Expected Graduation Date |
| Institution of Transfer Course Work (Upper Division Only) |  |

## General Studies Sequence (19 Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| Numeracy - ASC 315 | 3 |  |  |  |
| Science - ASC 325 | 4 |  |  |  |
| Literacy [L] ENG 301 or TWC 301 | 3 |  |  |  |
| Humanities [HU] REL 320 or 321 [H] [C] | 3 |  |  |  |
| Social Science [SB] | 3 |  |  |  |
| General Studies [HU or SB] | 3 |  |  |  |

(Suggested courses are tinted) Sub Total 19 Hrs.

## B.A.S. Area Core (15 Hours)

| ASU |  |  |  |  |  |  |  |  | Transfer | Transfer From | Grade |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TMC 346 Management Dynamics | 3 |  |  |  |  |  |  |  |  |  |  |
| APM 301 Introduction to Statistics [MA] | 3 |  |  |  |  |  |  |  |  |  |  |
| TWC 400 Tech Com [L] or other approved UD [L] | 3 |  |  |  |  |  |  |  |  |  |  |
| Select from Group A | 3 |  |  |  |  |  |  |  |  |  |  |
| Select from Group A | 3 |  |  |  |  |  |  |  |  |  |  |


| BAS Degree <br> Summary | Credit <br> Hours |
| :--- | :---: |
| A.A.S. Degree Block Transfer | 60 |
| General Studies |  |
| B.A.S. Area Core |  |
| Concentration |  |
| Assignable Credits |  |
| Total (120 Hours Minimum) |  |

## Advisor Comments

Sub Total 15 Hrs.

## Concentration ( 20 hrs )

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| Select from Group B | 3 |  |  |  |
| Select from Group B | 3 |  |  |  |
| Select from Group B | 3 |  |  |  |
| Select from Group B | 3 |  |  |  |
| Select from Group B | 3 |  |  |  |
| Select from Group B | 3 |  |  |  |
| CST 483 Capstone Project | 2 |  |  |  |

Sub Total 20 Hrs.

## Total Upper Division Hours

## Assignable Credits (6 Hours)

| ASU Transfer Transfer From |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 3 |  |  |  |
|  | 3 |  |  |  |

Total ASU Resident Hours $\qquad$


## Major Map：Computer Systems （Computer Hardware Technology）－ Bachelor of Science（B．S．）

College of Technology and Innovation，Polytechnic Campus
Catalog Year：2009－2010

|  | Hrs． |  | Completed ATP：$\square$ Yes $\square$ No |  | Completed AGEC： <br> Yes <br> Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） |  | Upper Division | Transfer Course／Grade | Minimum Grade if Required |  |
| TERM ONE：0－15 CREDIT HOURS |  |  |  |  |  |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  | －ASU 101 is for ASU freshman students only Not required of transfer students <br> －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> －＊Mathematical Studies（MA）designation approval pending <br> －Complete First－Year Composition requirement by end of semester 3 <br> －Complete at least 2 critical courses each with a minimum grade of C．Suggested courses for term 1： APM 270；CST 100，CST 150 |
| Complete 2 courses from： <br> MA course：（APM 265：Mathematics of Change I＊） <br> APM 266：Mathematics of Change II <br> CST 100：Object－Oriented Software Development <br> CST 150：Digital Systems I（CS） <br> CST 200\＆201：Object－Oriented Software Development II／Laboratory（ $\mathbf{3} / 1 \mathrm{hrs}$ ） <br> MAT 243：Discrete Mathematical Structures PHY 111／113：General Physics／Laboratory（SQ） CST 230：Applied Data Structures | $\begin{gathered} 3 \\ \\ 3 \text { or } \\ 3 / 1 \\ \hline \end{gathered}$ |  |  | Grade of C <br> Grade of C <br> Grade of C |  |
| ENG 101 or 102：First－Year Composition or ENG 105：Advanced First－Year Composition or ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| General Elective（UNI 101 recommended） | 1 | $\square$ |  |  |  |
| TERM TWO：16－30 CREDIT HOURS |  |  |  |  |  |
| Complete 2 additional courses from： <br> MA course：（APM 265：Mathematics of Change I＊） <br> APM 266：Mathematics of Change II <br> CST 100：Object－Oriented Software Development <br> CST 150：Digital Systems I（CS） <br> CST 200\＆201：Object－Oriented Software Development II／Laboratory（ $\mathbf{3} / 1 \mathrm{hrs}$ ） <br> MAT 243：Discrete Mathematical Structures <br> PHY 111／113：General Physics／Laboratory（SQ） <br> CST 230：Applied Data Structures | 3 $\begin{aligned} & 3 \text { or } \\ & 3 / 1 \\ & \hline \end{aligned}$ |  |  | Grade of C <br> Grade of C | －Complete at least 2 additional critical courses each with a minimum grade of C．Suggested courses for term 2：APM 271；CST 200 \＆ 201 <br> －Complete First－Year Composition requirement by end of semester 3 |
| CST 250／251：Microcomputer Architecture and Programming／Laboratory | 3／1 | $\square$ |  |  |  |
| ENG 101 or 102：First－Year Composition or ENG 105：Advanced First－Year Composition or ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| TERM THREE：31－45 CREDIT HOURS |  |  |  |  |  |
| Complete 2 additional courses from： <br> MA course：（APM 265：Mathematics of Change I＊） <br> APM 266：Mathematics of Change II <br> CST 100：Object－Oriented Software Development <br> CST 150：Digital Systems I（CS） <br> CST 200\＆201：Object－Oriented Software Development II／Laboratory（ $\mathbf{3} / 1 \mathrm{hrs}$ ） <br> MAT 243：Discrete Mathematical Structures <br> PHY 111／113：General Physics／Laboratory（SQ） <br> CST 230：Applied Data Structures | 3 $3 \text { or }$ $3 / 1$ |  |  | Grade of C <br> Grade of C | －Complete at least 2 additional critical courses each with a minimum grade of C．Suggested courses for term 3：MAT 243；PHY 111 \＆ 113 <br> －First－Year Composition requirement completed by end of semester 3 |
| CST 220：Programming Languages for Technology with C／C＋＋and Scripting | 3 | $\square$ |  |  |  |
| EST 210：Circuit Analysis I | 3 | $\square$ |  |  |  |
| TERM FOUR：46－60 CREDIT HOURS |  |  |  |  |  |
| Complete remaining courses from： <br> MA course：（APM 265：Mathematics of Change I＊） <br> APM 266：Mathematics of Change II <br> CST 100：Object－Oriented Software Development <br> CST 150：Digital Systems I（CS） <br> CST 200\＆201：Object－Oriented Software Development II／Laboratory（ $\mathbf{3} / \mathbf{1} \mathrm{hrs}$ ） <br> MAT 243：Discrete Mathematical Structures <br> PHY 111／113：General Physics／Laboratory（SQ） <br> CST 230：Applied Data Structures | 3 $\begin{aligned} & 3 \text { or } \\ & 3 / 1 \\ & \hline \end{aligned}$ |  |  | Grade of C <br> Grade of C | －Complete remaining critical courses each with a minimum grade of C．Suggested courses for term 4： CST 230 |
| APM 294：Mathematics of Change III | 3 | $\square$ |  |  |  |
| ECN 211：Macroeconomic Principles（SB） | 3 | $\square$ |  |  |  |
| EET 301：Electric Circuit Analysis II | 4 | 区 |  |  |  |
| PHY 112／114：General Physics／Laboratory（SQ） | 3／1 | $\square$ |  |  |  |
| TERM FIVE：61－75 CREDIT HOURS |  |  |  |  |  |
| APM 301：Introductory Statistics（CS） | 3 | 区 |  |  |  |
| CST 315：Software Enterprise I：Tools and Process | 3 | 区 |  |  |  |
| CST 350：Digital Systems Design with Verilog | 4 | 区 |  |  |  |
| CST 364：Computer Architecture | 3 | $\boxtimes$ |  |  |  |
| CST 386：Operating Systems Principles | 3 | $\boxtimes$ |  |  |  |

Major Map：Computer Systems （Computer Hardware Technology）－ Bachelor of Science（B．S．）
College of Technology and Innovation，Polytechnic Campus Catalog Year：2009－2010

| $\begin{aligned} & \hline \begin{array}{l} \text { Course Subject and Title } \\ \text { (courses in bold/shading are critical) } \end{array} \end{aligned}$ | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SIX：76－90 CREDIT HOURS |  |  |  |  |  |
| CST 452：Advanced Digital Systems Design and VHDL | 4 | 区 |  |  |  |
| CST 383：Shell and Script Programming with UNIX | 3 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Awareness in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SEVEN：91－105 CREDIT HOURS |  |  |  |  |  |
| CST 415：Software Enterprise III：Inception and Elaboration（L） | 3 | 区 |  |  |  |
| CST 456：Microcomputer Systems Interfacing | 4 | 区 |  |  |  |
| CST 458：Digital Computer Networks（3 hrs）or CST 473：Digital／Data Communications（4 hrs） | $\begin{gathered} \hline 3 \text { or } \\ 4 \\ \hline \end{gathered}$ | 区 |  |  |  |
| CST 496：Ethics and Professionalism in Computing | 1 | 囚 |  |  |  |
| Lab Science | 4 | $\square$ |  |  |  |
| TERM EIGHT：106－120 CREDIT HOURS |  |  |  |  |  |
| CST 416：Software Enterprise IV：Project \＆Process Management （ L$)^{* *}$ or <br> TWC 400：Technical Communications（L） | 3 | 区 |  |  | ＊＊Literacy（L）designation approval pending |
| UET 415：Electronic Manufacturing Engineering Principles | 3 | 区 |  |  |  |
| Upper division Humanities（HU）AND Cultural Awareness in the US （C），Global Awareness（G）or Historical Awareness（H）OR Upper division Social Behavioral Science（SB）AND Cultural Awareness in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | 区 |  |  |  |
| Technical Elective | 3 | 区 |  |  |  |
| Technical Elective | 4 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for <br> Academic Recognition <br> $(56$ minimum） | Major GPA（2．000 <br> Min．） | Total UD Hrs（45 <br> minimum） | Total Comm．College <br> Hrs．（64 maximum） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
－Literacy and Critical Inquiry（L）
－Mathematical Studies（MA）
－Computer／Statistics／Quantitative applications（CS）
－Humanities，Fine Arts，and Design（HU）
－Social and Behavioral Sciences（SB）
－Natural Science－Quantitative（SQ）
－Natural Science－General（SG）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）
－Global Awareness（G）
－Historical Awareness（H）
－First－Year Composition

## Additional Notes：

## 2011－2012 Major Map <br> Computer Systems（Embedded Systems Technology），BS

College of Technology and Innovation
Campus：Polytechnic WU⿴囗十⺝刂
TSCSTMBS


| Term 2 14－29 Credit Hours Critical course signified by | Hours | Minimum <br> Grade |
| :--- | :---: | :---: |
| CST 150：Digital Systems（CS） | 3 | C |
| EGR 102：Introduction to Engineering Design II | 3 | C |
| MAT 266：Calculus for Engineers II（MA） | 3 | C |
| PHY 121：University Physics I：Mechanics（SQ）AND | 4 | C |
| ENY 122：University Physics Laboratory I（SQ） |  |  |
| ENG 101 or ENG 102：First－Year Composition OR <br> ENG 105：Advanced First－Year Composition OR <br> ENG 107 or ENG 108：English for Foreign Students | 3 | C |
| Complete MAT 265 course（s）． |  |  |

－Students can take PHY 111／113 for this major but it will not satisfy BSE Engineering degree requirements．

| Term 3 30 －45 Credit Hours Critical course signified by |
| :--- |
| CST 220：Programming Languages for Technology with C／C＋＋and Scripting |
| EGR 280：Engineering Statistics（CS） |
| MAT 243：Discrete Mathematical Structures |
| MAT 267：Calculus for Engineers III（MA） |
| Complete MAT 266 course（s）． |
| CHM 113：General Chemistry I（SQ）OR <br> PHY 131：University Physics II：Electricity and Magnetism（SQ）AND <br> PHY 132：University Physics Laboratory II（SQ） |


| 1. CST 230：Applied Data Structures | 3 | C | －ECN 211 or ECN 212 recommended business exposure course |
| :---: | :---: | :---: | :---: |
| ．CST 250：Microcomputer Architecture and Programming AND CST 251：Microcomputer Architecture and Programming Laboratory | 4 | C |  |
| ECN 211：Macroeconomic Principles（SB）OR ECN 212：Microeconomic Principles（SB） | 3 |  |  |
| Lower Division Humanities，Fine Arts and Design（HU）AND Historical Awareness（H） | 3 |  |  |
| 4 Complete MAT 267 course（s）． |  |  |  |
| Elective | 1 |  |  |
| Term hours subtotal | 14 |  |  |


| Term 5 60-74 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| CST 315: Software Enterprise I: Tools and Process | 3 |  | - EST 210 pre-requisites: MAT 266 and PHY 121 |
| CST 350: Digital Systems Design with Verilog | 3 |  |  |
| EST 210: Circuit Analysis I | 3 |  |  |
| MAT 275: Modern Differential Equations (MA) | 3 |  |  |
| Lower Division Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 75-89 Credit Hours | Hours | Minimum Grade | Notes |
| CST 316: Software Enterprise II: Construction and Transition | 3 |  |  |
| CST 386: Operating Systems Principles | 3 |  |  |
| CST 364: Computer Architecture | 3 |  |  |
| MAT 343: Applied Linear Algebra | 3 |  |  |
| TWC 401: Principles of Technical Communication (L) OR TWC 446: Technical and Scientific Reports (L) OR Lower Division Literacy and Critical Inquiry (L) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 90-105 Credit Hours | Hours | Minimum Grade | Notes |
| CST 415: Software Enterprise III: Inception and Elaboration (L) | 3 |  |  |
| CST 420: Foundations of Distributed Web-Based Applications in Java | 3 |  |  |
| CST 456: Microcomputer Systems Interfacing | 3 |  |  |
| CST 496: Ethics and Professionalism in Computing | 1 |  |  |
| Mathematics (MA) OR <br> Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) | 3 |  |  |
| Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 8 106-120 Credit Hours | Hours | Minimum Grade | Notes |
| CST 416: Software Enterprise IV: Project and Process Management | 3 |  |  |
| CST 486: Embedded C Programming | 3 |  |  |
| CST Upper Division Elective | 3 |  |  |
| HST 318: History of Engineering ((L or SB) \& G) OR Upper Division Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| Upper Division Technical Elective | 3 |  |  |
| Term hours subtotal: | 15 |  |  |

Technical Electives
Upper Division CST
Upper Division EST
Upper Division UET

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)


## General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map Electronics Engineering Technology (Alternative Energy Technologies), BS

College of Technology and Innovation
Campus:Polytechnic WUE
TSEETABS

| Term 1 0-18 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 EST 194: Introduction to Electronic Systems | 3 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students <br> - Complete MAT 170 or 265 with a C or better <br> - Complete one science requirement: CHM 113, PHY 111/113, PHY 112/114 |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101: The ASU Experience | 1 |  |  |
| 4 CHM 113: General Chemistry I (SQ) | 4 |  |  |
| PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) | 4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Term hours subtotal: | 18 |  |  |
| Term 2 19-34 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| 4 EST 194: Digital Electronic Systems | 3 |  | - Complete MAT 265 or 266 with a C or better <br> - Complete one science requirement: CHM 113, PHY 111/113, PHY 112/114 |
| 4 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) | 4 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 35-49 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |


| EST 210: Circuit Analysis I | 3 |
| :--- | :--- |
| STP 420: Introductory Applied Statistics (CS) | 3 |
| CST 100: Object-Oriented Software Development I | 3 |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |
| Literacy and Critical Inquiry (L) | 3 |
| Complete First-Year Composition requirement. |  |
| Complete EST 210 course(s). | Term hours subtotal: |

- Complete MAT 266
- Complete PHY 112/114
- Complete CHM 113
- EST 210 requires completion of both MAT 266 and PHY 112
- EST 210 should be completed in term 3 for successful progressior in program courses. It may be taken in term 4 but student's may have impact on their program progression due to pre-requisites and course offerings.

| Term 4 50-63 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 EST 200: Project Lab | 2 |  | - UET 331 requires completion of PHY 112, CHM 113, and EST 210 <br> - Complete EST 200 |
| ALT 360: Renewable Energy Technologies: Fundamentals and Integration | 3 |  |  |
| EST 394: Digital Electronics II | 3 |  |  |
| UET 331: Electronic Materials | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 14 |  |  |


| Term 5 64-78 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| EST 310: Circuit Analysis II |  | 3 |  | - EST 310 offered in fall term only; EST 310 is a pre-requisite for courses in future terms. Must complete EST 310 in term 5 for successful progression in degree requirements |
| EST 370: Sensors |  | 3 |  |  |
| EST 394: Advanced Micro Controllers |  | 3 |  |  |
| UET 305: Introduction to Microelectronics |  | 3 |  |  |
| Social and Behavioral Sciences (SB) |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours |  | Hours | Minimum Grade | Notes |
| EST 345: Planning and Delivering Engineering Projects |  | 3 |  |  |
| EST 372: Wireless Communication Systems |  | 3 |  |  |
| EST 394: Introduction to Electronic Devices |  | 3 |  |  |
| EST 494: Electronics Systems Design |  | 3 |  |  |
| ALT 401: Hydrogen Generation, Storage, and Distribution |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 94-111 Credit Hours |  | Hours | Minimum Grade | Notes |
| EST 494: Capstone Project I for ES students |  | 3 |  |  |
| EST 494: Statistical Process Control |  | 3 |  |  |
| TWC 446: Technical and Scientific Reports (L) |  | 3 |  |  |
| ALT 410: Solar Cells and Module |  | 3 |  |  |
| ALT 420: Electrochemical Energy Technologies |  | 3 |  |  |
| ALT 435: Applied Photovoltaics |  | 3 |  |  |
|  | Term hours subtotal: | 18 |  |  |
| Term 8 112-126 Credit Hours |  | Hours | Minimum Grade | Notes |
| EST 494: Capstone Project II for ES students |  | 3 |  |  |
| Upper Division Technical Elective |  | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) |  | 3 |  |  |
| ALT 405: Power Conditioning |  | 3 |  |  |
| ALT 445: Automotive and Stationary Fuel Cell Systems |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Upper Division Technical Elective |  |  |  |  |
| AET Upper Division Elective |  |  |  |  |
| ALT Upper Division Elective |  |  |  |  |
| EET Upper Division Elective |  |  |  |  |
| EST Upper Division Elective |  |  |  |  |
| MET Upper Division Elective |  |  |  |  |
| UET Upper Division Elective |  |  |  |  |

Total Hours: 126
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011－2012 Major Map

## Electronics Engineering Technology（Electronic Systems），BS

College of Technology and Innovation
Campus：Polytechnic WU⿴囗十心
TSEETEBS


| Term 2 19－34 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4. EST 194：Digital Electronic Systems | 3 |  | －Complete MAT 265 or 266 with a C or better <br> －Complete one science requirement：CHM 113，PHY 111／113，PHY 112／114 |
| 4. MAT 266：Calculus for Engineers II（MA） | 3 | C |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students | 3 | C |  |
| PHY 112：General Physics（SQ）AND <br> PHY 114：General Physics Laboratory（SQ） | 4 |  |  |
| Social and Behavioral Sciences（SB）AND Cultural Diversity in the U．S．（C） | 3 |  |  |
| Term hours subtotal： | 16 |  |  |
| Term 3 35－49 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 4 EST 210：Circuit Analysis I | 3 |  | －Complete MAT 266 <br> －Complete PHY 112／114 <br> －Complete CHM 113 <br> －EST 210 requires completion of both MAT 266 and PHY 112 <br> －EST 210 should be completed in term 3 for successful progressior in program courses．It may be taken in term 4 but student＇s may have impact on their program progression due to pre－requisites and course offerings． |
| 4 STP 420：Introductory Applied Statistics（CS） | 3 |  |  |
| CST 100：Object－Oriented Software Development I | 3 |  |  |
| Humanities，Fine Arts and Design（HU）AND Global Awareness（G） | 3 |  |  |
| Literacy and Critical Inquiry（L） | 3 |  |  |
| 4 Complete First－Year Composition requirement． |  |  |  |
| Term hours subtotal： | 15 |  |  |


| Term 4 50－63 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 EST 200：Project Lab | 2 |  | －UET 331 requires completion of PHY 112 and CHM 113 <br> －Complete EST 200 |
| ALT 360：Renewable Energy Technologies：Fundamentals and Integration | 3 |  |  |
| EST 394：Digital Electronics II | 3 |  |  |
| UET 331：Electronic Materials | 3 |  |  |
| Humanities，Fine Arts and Design（HU）AND Historical Awareness（H） | 3 |  |  |
| Term hours subtotal： | 14 |  |  |


| Term 5 64-78 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| EST 310: Circuit Analysis II | 3 |  | - EST 310 offered in fall term only; EST 310 is a pre-requisite for courses in future terms. Must complete EST 310 in term 5 for successful progression in degree requirements. |
| EST 370: Sensors | 3 |  |  |
| EST 394: Advanced Micro Controllers | 3 |  |  |
| UET 305: Introduction to Microelectronics | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 6 79-93 Credit Hours | Hours | Minimum Grade | Notes |
| EST 345: Planning and Delivering Engineering Projects | 3 |  |  |
| EST 372: Wireless Communication Systems | 3 |  |  |
| EST 394: Introduction to Electronic Devices | 3 |  |  |
| EST 494: Electronics Systems Design | 3 |  |  |
| MET 351: Introduction to Automation | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 94-111 Credit Hours | Hours | Minimum Grade | Notes |
| EST 494: Capstone Project I for ES students | 3 |  |  |
| EST 494: Statistical Process Control | 3 |  |  |
| TWC 446: Technical and Scientific Reports (L) | 3 |  |  |
| EET 406: Control System Technology | 3 |  |  |
| EET 430: Instrumentation and Measurement Systems | 3 |  |  |
| MET OR AET OR EST OR ALT OR EET OR UET Upper Division Elective | 3 |  |  |
| Term hours subtotal: | 18 |  |  |
| Term 8 112-126 Credit Hours | Hours | Minimum Grade | Notes |
| EST 494: Capstone Project II for ES students | 3 |  |  |
| Upper Division Technical Elective | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| ALT 405: Power Conditioning OR EET 460: Power Electronics | 3-4 |  |  |
| EET 494: Digital Realtime Control | 3 |  |  |
| Term hours subtotal: | 15-16 |  |  |

Technical Elecitve
AET Upper Division Elective
ALT Upper Division Elective
EET Upper Division Elective
EST Upper Division Elective
MET Upper Division Elective
UET Upper Division Elective

Total Hours: 126
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum Total hrs at ASU: 30 minimum Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011-2012 Major Map Electronics Engineering Technology (Integrated Electronic Systems), BS

College of Technology and Innovation
Campus:Polytechnic WU日
TSEETINBS

| Term 1 0-18 Credit Hours Critical course signified by 9 | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: |
| 1 EST 194: Introduction to Electronic Systems | 3 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students <br> - Complete MAT 170 or 265 with a C or better <br> - Complete one science requirement: CHM 113, PHY 111/113, PHY 112/114 |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| 4 CHM 113: General Chemistry I (SQ) | 4 |  |  |
| PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) | 4 | C |  |
| ASU 101: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Term hours subtotal: | 18 |  |  |
| Term 2 19-34 Credit Hours Critical course signified by ${ }^{\text {2 }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| 4 EST 194: Digital Electronic Systems | 3 |  | - Complete MAT 265 or 266 with a C or better <br> - Complete one science requirement: CHM 113, PHY 111/113, PHY 112/114 |
| 4 MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) | 4 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 35-49 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |



| Term 4 50-66 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 EST 200: Project Lab | 2 |  | - UET 331 requires completion of PHY 112 and CHM 113 <br> - UET 331 must be completed for successful progression in degree and concentration courses <br> - Complete EST 200 |
| 4 UET 331: Electronic Materials | 3 |  |  |
| ALT 360: Renewable Energy Technologies: Fundamentals and Integration | 3 |  |  |
| EST 394: Digital Electronics II | 3 |  |  |



## 2011-2012 Major Map <br> Engineering, BSE

College of Technology and Innovation
Campus: Polytechnic WUG
TSEGRBSE

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{\mathbf{4}}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4. EGR 101: Introduction to Engineering Design I | 3 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| (1) MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101: The ASU Experience | 1 |  |  |
| CHM 113: General Chemistry I (SQ) | 4 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Term hours subtotal: | 14 |  |  |
| Term 2 15-29 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| (1) EGR 102: Introduction to Engineering Design II | 3 |  |  |
| EGR 104: Critical Inquiry in Engineering (L) | 3 |  |  |
| 4. MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| (1) PHY 121: University Physics I: Mechanics (SQ) | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| (1) Complete MAT 265 course(s). |  |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 3-46 Credit Hours Critical course signified by ${ }^{4}$ | Hours | Minimum Grade | Notes |


| EGR 201: Fall Multidisciplinary Project | 3 |  | - Students should enroll in EGR 226: Engineering Applications of LabView with EGR 201 (EGR 226 is used as an Engineering Fundamentals Module) |
| :---: | :---: | :---: | :---: |
| MAT 267: Calculus for Engineers III (MA) | 3 | C |  |
| EGR 280: Engineering Statistics (CS) | 3 |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| Complete Mathematics (MA) requirement. |  |  |  |
| EGR 220: Computer Hardware for Engineers OR <br> EGR 221: Engineering Mechanics: Statics OR <br> EGR 222: Mechanics of Materials OR <br> EGR 223: Engineering Thermodynamics OR <br> EGR 224: Engineering Materials Selection OR <br> EGR 225: Instrumentation I OR <br> EGR 226: Engineering Applications of LabView OR <br> EGR 227: Manufacturing Processes I OR <br> EGR 229: Engineering Ethics and Professionalism OR <br> EGR 230: Fluid Mechanics OR <br> EGR 231: Engineering Mechanics: Dynamics OR | 5 |  |  |
| EGR 234: Structure and Properties of Engineering Materials OR <br> EGR 235: Instrumentation II OR <br> EGR 238: Feedback Control OR <br> EGR 239: Engineering Economics OR <br> EGR 294: Manufacturing Processes II OR <br> EGR 294: Design of Experiments OR <br> null null: null |  |  |  |
| Social and Behavioral Sciences (SB) OR Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Complete First-Year Composition requirement. |  |  |  |
| Complete MAT 266 course(s). |  |  |  |
| Complete PHY 121 course(s). |  |  |  |
| Term hours subtotal: | 17 |  |  |


| Term 4 47-63 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| EGR 202: Spring Multidisciplinary Project | 3 |  | - EGR 224: Engineering Materials Selection is taken with EGR 202 (EGR 224 is used toward Engineering Fundamentals Module) |
| HST 318: History of Engineering ( $(\mathrm{L}$ or SB) \& G) | 3 |  |  |
| MAT 275: Modern Differential Equations (MA) OR MAT 274: Elementary Differential Equations (MA) | 3 |  |  |

Complete MAT 267 course(s).
EGR 220: Computer Hardware for Engineers OR
EGR 221: Engineering Mechanics: Statics OR
EGR 222: Mechanics of Materials OR

|  <br> EGR 224: Engineering Materials EGR 225: Instrumentation I OR <br> EGR 226: Engineering Applications of LabView OR <br> EGR 227: Manufacturing Processes I OR <br> EGR 229: Engineering Ethics and Professionalism OR <br> EGR 230: Fluid Mechanics OR <br> EGR 231: Engineering Mechanics: Dynamics OR <br> EGR 234: Structure and Properties of Engineering Materials OR <br> EGR 235: Instrumentation II OR <br> EGR 238: Feedback Control OR <br> EGR 239: Engineering Economics OR <br> EGR 294: Manufacturing Processes II OR <br> EGR 294: Design of Experiments OR <br> null null: null | 5 |  |  |
| :---: | :---: | :---: | :---: |
| Upper Division Social and Behavioral Sciences (SB) OR Upper Division Humanities, Fine Arts and Design (HU) | 3 |  |  |
| (4) Complete MAT 267 course(s). |  |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 5 64-79 Credit Hours | Hours | Minimum Grade | Notes |
| EGR 301: Fall Concentration Project | 3 |  | Consult with an advisor for selection of Primary Focus area courses from the following options: <br> - Civil Engineering / Land Development <br> - Electrical Engineering Systems <br> - Mechanical Engineering Systems <br> - Robotics (Mechanical) <br> - Robotics (Electrical) <br> See notes with major map on the courses required for each focus area. |
| Upper Division Primary Focus Area | 3 |  |  |
| Secondary Focus Area | 3 |  |  |
| BIO 181: General Biology I (SQ) OR <br> CHM 116: General Chemistry II (SQ) OR <br> GLG 101: Introduction to Geology I (Physical) (SQ \& G) AND <br> GLG 103: Introduction to Geology I-Laboratory (SQ) OR <br> PHY 122: University Physics Laboratory I (SQ) OR <br> PHY 131: University Physics II: Electricity and Magnetism (SQ) AND <br> PHY 132: University Physics Laboratory II (SQ) OR <br> BIO 182: General Biology II (SG) | 4 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 6 80-94 Credit Hours | Hours | Minimum Grade | Notes |
| EGR 302: Spring Concentration Project | 3 |  |  |
| Upper Division Primary Focus Area | 3 |  |  |
| MAT 343: Applied Linear Algebra | 3 |  |  |
| Secondary Focus Area | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 15 |  |  |
| Term 7 95-107 Credit Hours | Hours | Minimum Grade | Notes |
| EGR 401: Engineering Capstone Project I (L) | 4 |  | Upper division science courses are selected by emphasis area: <br> - Civil Engineering / Land Development are required to take ABS 485 GIS in Natural Resources <br> - Electrical Engineering Sy stems students are required to take PHY 331 Principles of Modern Electromagnetism <br> - Mechanical Engineering Systems, Robotics (Mechanical), and Robotics (Electrical) are required to take PHY 321 Vector Mechanics and Vibration |
| Upper Division Primary Focus Area | 3 |  |  |
| Upper Division Secondary Focus Area | 3 |  |  |
| PHY 321: Vector Mechanics and Vibration OR <br> PHY 331: Principles of Modern Electromagnetism OR <br> ABS 485: GIS in Natural Resources <br> Term hours subtotal: | 3 |  |  |
|  | 13 |  |  |
| Term 8 108-120 Credit Hours | Hours | Minimum Grade | Notes |
| EGR 402: Engineering Capstone Project II | 4 |  |  |
| Upper Division Primary Focus Area | 3 |  |  |
| Upper Division Secondary Focus Area | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) AND Upper Division Cultural Diversity in the U.S. (C) | 3 |  |  |
| Term hours subtotal: | 13 |  |  |

- PRIMARY FOCUS AREAS


## Civil Engineering/Land Development

Engineering Fundamentals:

- EGR 221: Engineering Mechanics: Statics, pre-requisites: PHY 121; EGR 102 (1)
- EGR 222: Mechanics of Materials, pre-requisites: PHY 121; EGR 102 (1)
- EGR 230: Fluid Mechanics, pre-requisite: EGR 221 (1)



## Upper division science:

- ABS 485 GIS in Natural Resources, pre-requisite: EGR 280 (3)

Focus Area Courses:

- EGR 321/394: Water Resources Engineering, pre-requisite: EGR 230 (3)
- EGR 324: Structural Design Land Development, pre-requisites EGR 221; EGR 222 (3)
- EGR 494: Environmental Engineering, pre-requisites: EGR 321/394 (3)
- EGR 494: Civil Design, pre-requisites: EGR 321/394; EGR 494 (3)


## Electrical Engineering Systems

Engineering Fundamentals (modules):

- EGR 225: Instrumentation I, pre-requisites: EGR 102; MAT 170 or higher (1)
- EGR 235: Instrumentation II, pre-requisites: EGR 225; MAT 265 (1)
- EGR 238: Feedback Control, pre-requisites: PHY 121 (1)
- 5-7 credit hours of additional modules between EGR 220 and EGR 259 (5)

Upper division science:

- PHY 331: Principles of Modern Electromagnetism (3)

Focus Area Courses:

- EGR 333: Distributed Circuits and Systems, pre-requisites EGR 235; MAT 275 (3)
- EGR 339: Fabrication of Electrical Systems, pre-requisites EGR 235; MAT 275 (3)
- EGR 433: Transforms \& Systems Modeling, pre-requisites EGR 235; MAT 275; MAT 343 (3)
- EGR modules, example: EGR 335, EGR 336, EGR 494: Power Electronics (3)


## Mechanical Engineering Systems

Engineering Fundamentals:

- EGR 221: Engineering Mechanics: Statics, pre-requisites: PHY 121; EGR 102 (1)
- EGR 222: Mechanics of Materials, pre-requisites: PHY 121; EGR 102 (1)
- EGR 231: Engineering Mechanics: Dynamics, pre-requisites: PHY 121 (1)
- 5-7 credit hours of additional modules between EGR 220 and EGR 259 (5)

Upper division science:

- PHY 321 (3) Vector Mechanics and Vibration (3)

Focus Area Courses:

- EGR 340: Engineering Thermo-Fluids I, pre-requisites PHY 111 or 121; MAT 266 (3)
- EGR 343: Mechanics of Solid Materials, pre-requisites EGR 221; EGR 222 (3)
- EGR 346: Engineering Design, pre-requisite EGR 343 (3)
- EGR 445: Mechanical Engineering Systems, pre-requisite EGR 301 or 302 (3)


## Robotics (Mechanical)

Engineering Fundamentals

- EGR 221: Engineering Mechanics: Statics, pre-requisites: PHY 121; EGR 102 (1)
- EGR 222: Mechanics of Materials, pre-requisites: PHY 121; EGR 102 (1)
- EGR 231: Engineering Mechanics: Dynamics, pre-requisites: PHY 121 (1)
- 5-7 credit hours of additional modules between EGR 220 and EGR 259 (5)

Upper division science:

- PHY 321 (3) Vector Mechanics and Vibration

Focus Area Courses:

- EGR 353/394: Robotics I, pre-requisites: MAT 275; EGR 222 (3)
- EGR 343: Mechanics of Solid Materials, pre-requisites EGR 221; EGR 222 (3)
- EGR 346: Engineering Design, pre-requisite EGR 343 (3)
- EGR 453/494: Robotics II, pre-requisites: EGR 346 (3)

Robotics (Electrical)
Engineering Fundamentals

- EGR 221: Engineering Mechanics: Statics, pre-requisites: PHY 121; EGR 102 (1)
- EGR 222: Mechanics of Materials, pre-requisites: PHY 121; EGR 102 (1)
- EGR 231: Engineering Mechanics: Dynamics, pre-requisites: PHY 121 (1)
- 5-7 credit hours of additional modules between EGR 220 and EGR 259 (5)

Upper division science:

- PHY 321: Vector Mechanics and Vibration (3)

Focus Area Courses:

- EGR 353/394: Robotics I, pre-requisites: MAT 275; EGR 222 (3)
- EGR 333: Distributed Circuits and Systems, pre-requisites EGR 235; MAT 275 (3)
- EGR 433: Transforms and Systems Modeling, pre-requisites EGR 235; MAT 275; MAT 343 (3)
- EGR 453/494: Robotics II, pre-requisites: EGR 353/394: Robotics I (3)
- SECONDARY FOCUS AREAS

A secondary focus area is a group of courses comprising of 12 or more credit hours (minimum 6 hours upper division at the 300 or 400 level) which form a coherent theme. For example, all courses may share a common subject prefix. Students work with their advisor to identify their secondary focus area.

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64
maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Environmental Technology Management, BS

College of Technology and Innovation
Campus:Polytechnic WUE
TSETMBS

| Term 1 0-14 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| :---: | :---: | :---: | :---: |
| BIO 100: The Living World (SQ) AND CHM 101: Introductory Chemistry (SQ) AND PHY 101: Introduction to Physics (SQ) | 4 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| 4 MAT 170: Precalculus (MA) | 3 |  |  |
| ASU 101: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Historical Awareness (H) | 3 |  |  |
|  | 14 |  |  |
| Term 2 15-30 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| BIO 100: The Living World (SQ) AND CHM 101: Introductory Chemistry (SQ) AND PHY 101: Introduction to Physics (SQ) | 4 |  |  |
| 1 MAT 210: Brief Calculus (MA) | 3 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| Elective | 3 |  |  |
| 4 Complete MAT 170 course(s). |  |  |  |
|  | 16 |  |  |
| Term 3 31-44 Credit Hours Critical course signified by ${ }^{\text {+ }}$ | Hours | Minimum Grade | Notes |
| BIO 100: The Living World (SQ) AND CHM 101: Introductory Chemistry (SQ) AND PHY 101: Introduction to Physics (SQ) | 4 |  |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| Mathematics (MA) OR <br> Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) OR <br> Computer/Statistics/Quantitative Applications (CS) | 4 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| 4 Complete MAT 210 course(s). |  |  |  |
|  | 14 |  |  |
| Term 4 45-60 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 4 CHM 231: Elementary Organic Chemistry (SQ) | 4 |  |  |
| ABS 270: Sustainable Biological Systems | 3 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Mathematics (MA) OR <br> Natural Science - General (SG) OR <br> Natural Science - Quantitative (SQ) OR <br> Computer/Statistics/Quantitative Applications (CS) | 3 |  |  |
| Elective | 3 |  |  |

Complete BIO 100, CHM 101, PHY 101 course(s).


[^26]
## 2011-2012 Major Map Food Industry Management, BS

College of Technology and Innovation
Campus:Polytechnic
BAFIMBS

| Term 1 0-16 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 CIS 105: Computer Applications and Information Technology (CS) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course |
| MAT 210: Brief Calculus (MA) OR <br> MAT 270: Calculus with Analytic Geometry I (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| WPC 101: Student Success in Business | 1 |  |  |
| Humanities, Fine Arts and Design (HU) | 3 |  | - ASU 101 or College specific equivalent First Year Seminar |
| PGS course (SB) | 3 |  | required of all freshman |
| 4 Minimum 2.00 GPA ASU Cumulative. |  |  | - Students. |
| Term hours subtotal: | 16-17 |  | appropriate Student Success course requirement if not a first-time freshman. |


| Term 2 17-32 Credit Hours Critical course signified by 9 | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| :---: | :---: | :---: | :---: |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA) | 3-4 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Natural Science - Quantitative (SQ) | 4 |  |  |
| SOC course (SB) | 3 |  |  |
| 4. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| Term hours subtotal: | 16-17 |  |  |
| Term 3 33-48 Credit Hours Critical course signified by ${ }^{\text {! }}$ | Hours | Minimum Grade | Notes |
| 4 ACC 231: Uses of Accounting Information I | 3 | C |  |
| ECN 211: Macroeconomic Principles (SB) OR ECN 212: Microeconomic Principles (SB) | 3 | C |  |
| COM 100: Introduction to Human Communication (SB) OR <br> COM 225: Public Speaking (L) OR <br> COM 230: Small Group Communication (SB) OR <br> COM 259: Communication in Business and the Professions | 3 |  |  |
| Literacy and Critical Inquiry (L) | 3 |  |  |
| $\begin{aligned} & \text { Natural Science - Quantitative (SQ) OR } \\ & \text { Natural Science - General (SG) } \end{aligned}$ | 4 |  |  |
| 1. Minimum 2.00 GPA ASU Cumulative. |  |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 4 49-64 Credit Hours Critical course signified by ${ }^{\text {4 }}$ | Hours | Minimum Grade | Notes |
| 1 ACC 241: Uses of Accounting Information II | 3 | C |  |
| 4 ECN 221: Business Statistics (CS) | 3 | C |  |
| MKT 300: Marketing and Business Performance | 3 | C |  |

TWC 347: Written Communication for Managers (L) OR 3
ENG 301: Writing for the Professions (L)

C

| WPC 301: Business Forum | 1 |
| :--- | ---: |
| Historical Awareness (H) | 3 |

Milestone: The business skill courses are critical requirements that must be completed by the end of Term Four: CIS 105, MAT 210, MAT 211, ECN 211, ECN 212, ACC 231, ACC 241, ECN 221.
Minimum 2.00 GPA ASU Cumulative.
Term hours subtotal: 16

| Term 5 65-79 Credit Hours |  | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: | :---: |
| AGB 420: Food Advertising and Promotion |  | 3 | C |  |
| FIN 300: Fundamentals of Finance |  | 3 | C |  |
| SCM 300: Global Supply Operations |  | 3 | C |  |
| Cultural Diversity in the U.S. (C) |  | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) |  | 3 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 6 80-94 Credit Hours |  | Hours | Minimum Grade | Notes |
| AGB 425: Agricultural Marketing Channels |  | 3 | C |  |
| AGB 435: Commodity Futures and Options Markets |  | 3 | C |  |
| MGT 300: Organization and Management Leadership |  | 3 | C |  |
| Complete 2 courses: General Education Elective |  | 6 |  |  |
|  | Term hours subtotal: | 15 |  |  |
| Term 7 95-108 Credit Hours |  | Hours | Minimum Grade | Notes |
| AGB 445: Food Retailing |  | 3 | C |  |
| AGB 456: Food Product Innovation and Development |  | 3 | C |  |
| LES 305: Legal, Ethical, and Regulatory Issues in Business |  | 3 | C |  |
| Upper Division Elective |  | 3 |  |  |
| Elective |  | 2 |  |  |
|  | Term hours subtotal: | 14 |  |  |
| Term 8 109-120 Credit Hours |  | Hours | Minimum Grade | Notes |
| AGB 302: International Management and Agribusiness (G) OR ECN 306: Survey of International Economics (SB \& G) OR MGT 302: Principles of International Business (G) |  | 3 | C |  |
| AGB 481: Microeconomic Analysis of Food Markets |  | 3 | C |  |
| Complete 2 courses: Upper Division Elective |  | 6 |  |  |
|  | Term hours subtotal: | 12 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

## 2011－2012 Major Map <br> Graphic Information Technology，BS

College of Technology and Innovation
Campus：Polytechnic WU⿴囗十⺝刂
TSGITBS

| Term 1 0－16 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1．GIT 135：Graphic Communications | 3 |  | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> －ASU 101 or College specific equivalent First Year Seminar required of all freshman students |
| 4 GIT 215：Introduction to Graphics Programming | 3 |  |  |
| ASU 101：The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students | 3 | C |  |
| MAT 170：Precalculus（MA） | 3 |  |  |
| Humanities，Fine Arts and Design（HU）AND Historical Awareness（H） | 3 |  |  |
| Term hours subtotal： | 16 |  |  |
| Term 2 17－31 Credit Hours Critical course signified by 9 | Hours | Minimum Grade | Notes |
| 4 GIT 230：Digital Illustration in Publishing | 3 |  |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students | 3 | C |  |
| CHM 101：Introductory Chemistry（SQ）OR PHY 101：Introduction to Physics（SQ）OR Natural Science－Quantitative（SQ） | 4 |  |  |
| PGS 101：Introduction to Psychology（SB）OR Social and Behavioral Sciences（SB） | 3 |  |  |
| Elective | 2 |  |  |
| Complete MAT 170 course（s）． |  |  |  |
| Term hours subtotal： | 15 |  |  |
| Term 3 32－47 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| 4 GIT 210：Creative Thinking and Design Visualization | 3 |  |  |
| 4 GIT 237：Web Content Design | 3 |  |  |
| Humanities，Fine Arts and Design（HU）AND Global Awareness（G） | 3 |  |  |
| CHM 101：Introductory Chemistry（SQ）OR PHY 101：Introduction to Physics（SQ）OR <br> Natural Science－Quantitative（SQ）OR <br> Natural Science－General（SG） | 4 |  |  |
| Elective | 3 |  |  |
| 1．Complete First－Year Composition requirement． |  |  |  |
| Complete Mathematics（MA）requirement． |  |  |  |
| 4 Complete GIT 135，GIT 215，GIT 230，GIT 210，GIT 237 course（s）． |  |  |  |
| Term hours subtotal： | 16 |  |  |
| Term 4 48－62 Credit Hours | Hours | Minimum Grade | Notes |
| ECN 211：Macroeconomic Principles（SB）OR ECN 212：Microeconomic Principles（SB） OR Social and Behavioral Sciences（SB） | 3 |  |  |
| STP 420：Introductory Applied Statistics（CS） | 3 |  |  |
| Literacy and Critical Inquiry（L） | 3 |  |  |
| Upper Division Humanities，Fine Arts and Design（HU）AND Cultural Diversity in the U．S．（C）OR <br> Upper Division Social and Behavioral Sciences（SB）AND Cultural Diversity in the U．S． （C） | 3 |  |  |
| Elective | 3 |  |  |
| Term hours subtotal： <br> Academic Catalog Archive 2011－2012 1670 |  |  |  |
| Page 1 |  |  |  |


| Term 5 63-77 Credit Hours |  | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ |  | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GIT 303: Digital Publishing |  | 3 |  |  |  |
| GIT 384: Commercial Photography |  | 3 |  |  |  |
| TMC 346: Management Dynamics |  | 3 |  |  |  |
| Technical Focus Area A |  | 3 |  |  |  |
| Technical Focus Area B |  | 3 |  |  |  |
|  | Term hours subtotal: | 15 |  |  |  |
| Term 6 78-90 Credit Hours |  | Hours | Minimum Grade |  | Notes |
| GIT 314: Multimedia Design, Planning and Storyboards |  | 3 |  | - TMC 331 requi TMC 346 and S |  |
| TMC 331: Quality Assurance |  | 3 |  |  |  |
| TMC 396: Professional Orientation |  | 1 |  |  |  |
| Technical Focus Area A |  | 3 |  |  |  |
| Technical Focus Area B |  | 3 |  |  |  |
|  | Term hours subtotal: | 13 |  |  |  |
| Term 7 91-105 Credit Hours |  | Hours | Minimum Grade |  | Notes |
| GIT 432: Graphic Industry Business Practices |  | 3 |  |  |  |
| TMC 470: Project Management |  | 3 |  |  |  |
| Upper Division Technical Focus Area A |  | 3 |  |  |  |
| Upper Division Technical Focus Area B |  | 3 |  |  |  |
| TWC 401: Principles of Technical Communication (L) OR TWC 446: Technical and Scientific Reports (L) OR TWC 347: Written Communication for Managers (L) OR TWC 431: Principles of Technical Editing (L) OR TWC 421: Principles of Writing with Technology (L) OR Upper Division Literacy and Critical Inquiry (L) |  | 3 |  |  |  |
|  | Term hours subtotal: | 15 |  |  |  |
| Term 8 106-120 Credit Hours |  | Hours | Minimum Grade |  | Notes |
| GIT 413: Professional Portfolio Design and Presentation |  | 3 |  |  |  |
| OMT 440: Introduction to International Business |  | 3 |  |  |  |
| TMC 480: Senior Project |  | 3 |  |  |  |
| Upper Division Technical Focus Area A |  | 3 |  |  |  |
| Upper Division Technical Focus Area B | Term hours subtotal: | 3 |  |  |  |
|  |  | 15 |  |  |  |
| Gaming (must be accepted into gaming certificate program) | Reproduction Technology | Informatics |  |  |  |
| CPI 111: Game Development I (CS) | GIT 333: Printing Technology | CPI 101: Introduction to Informatics (CS) |  |  |  |
|  | GIT 334: Image Capture and Manipulation | CPI 200: Mathematical Foundations of Informatics (MA) |  |  |  |
| CPI 211: Game Development II |  |  |  |  |  |
| CPI 311: Game Engine Development | GIT 436: Gravure Technology | CPI 400: Scientific Computing and Visualization |  |  |  |
| CPI 420: Technology and Society | GIT 437: Color Reproduction Systems |  |  |  |  |
|  |  | CPI 420: Technology and Society |  |  |  |
| Mass Communications | Modeling \& Animation | Graph |  |  |  |
| MCO 120: Media and Society (SB) | GIT 212: Computer-Aided Design and Drafting (CADD) (CS) | GRA 225: Communication/Interaction Design Theory |  |  |  |
| MCO 200: Introduction to Electronic Media | GIT 312: 3-D Computer Graphics Modeling and Representation (CS) | GRA 401: Creative Environment |  |  |  |
| MCO 418: History of Mass Communication (SB \& H) |  |  |  |  |  |  |  |
|  | GIT 313: Technical Illustration and Photorealistic Rendering | GRA 464: Collaborative Design Development I (L) |  |  |  |
| MCO 430: International Mass Communication (G) |  | GRA 465: Collaborative Design Developmen II (L) |  |  |  |
|  | GIT 411: Computer Animation |  |  |  |  |
| Physical Geography | Industrial Design | Multimedia Writing and Technical Communication |  |  |  |
| GPH 411: Physical Geography | IND 242: Materials and Design <br> Academic Catalog Archive 2011-2012 1671 |  |  |  |  |


| GPH 371: Introduction to Cartography and Georepresentation (CS) | IND 344: Human Factors in Design | TWC 301: General Principles of Multimedia Writing (L) |
| :---: | :---: | :---: |
| GPH 373: Geographic Information Science I (CS) | IND 464: Collaborative Design Development I (L) | TWC 347: Written Communication for Managers (L) |
| GPH 471: Geographics: Interactive and Animated Cartography and Geovisualization (CS) | IND 465: Collaborative Design Development II (L) | TWC 445: Computer Documentation |
|  |  | TWC 446: Technical and Scientific Reports (L) |
| Web Development | Film and Media Studies | Applied Psychology (must take pre-req PSY 101) |
| GIT 414: Web Site Design and Internet/Web Technologies | FMS 100: Introduction to Film (HU) | PSY 290: Research Methods (L or SG) |
| GIT 417: Advanced Internet Programming | FMS 354: Critical Studies in Animation | PSY 323: Sensation and Perception |
| GIT 418: Multimedia Authoring, Scripting and Production | FMS 450: Technology, Culture, and Media (L or HU) | PSY 360: Cognitive Science |
|  | FMS 481: Entertainment Technologies | PSY 438: Human-Computer Interaction |

Total Hours: 120
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## Hrs Resident Credit for

Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year

## 2011-2012 Major Map Manufacturing Engineering Technology, BS

College of Technology and Innovation
Campus:Polytechnic WUE
TSMETBS

| Term 1 0-14 Credit Hours Critical course signified by | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| :---: | :---: | :---: | :---: |
| MAT 170: Precalculus (MA) OR <br> MAT 265: Calculus for Engineers I (MA) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses |
| MET 150: Introduction to Engineering Technology OR MET 160: CADD and Solid Modeling | 1-2 |  |  |
| CHM 113: General Chemistry I (SQ) OR <br> PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) OR <br> PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) | 4 |  | - ASU Math Placement Exam score determines placement in Mathematics course |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C | required of all freshman students <br> - MET 150 is only offered in fall semesters. Students are strongly encouraged to enroll in MET 150 in their first fall semester at ASU. <br> - Students complete one of the following sequences: a) MAT 170 , MAT 265 , MAT 266 , and STP 420 OR b) MAT 265, MAT 266, MAT 274/275, and STP 420 |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| 4 Complete MAT, STP course(s). |  |  |  |
| 4 Complete PHY, CHM course(s). |  |  |  |
| 4 Complete MET 213 course(s). |  |  |  |
| Term hours subtotal: | 14-15 |  |  |
| Term 2 15-28 Credit Hours Critical course signified by 9 | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| 1. MET 160: CADD and Solid Modeling | 2 |  |  |
| 4 MET 230: Introduction to Engineering Materials | 2 |  |  |
| MAT 265: Calculus for Engineers I (MA) OR MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| CHM 113: General Chemistry I (SQ) OR <br> PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) OR <br> PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) | 4 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 Complete MAT, STP course(s). |  |  |  |
| 4 Complete PHY , CHM course(s). |  |  |  |
| 4. Complete MET 213 course(s). |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 29-44 Credit Hours Critical course signified by ${ }^{\text {a }}$ | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| 4 MET 211: Statics | 3 |  |  |
| 4 MET 231: Manufacturing Processes | 3 |  |  |
| MAT 266: Calculus for Engineers II (MA) OR MAT 275: Elementary Differential Equations (MA) | 3 |  |  |
| CHM 113: General Chemistry I (SQ) OR PHY 111: General Physics (SQ) AND PHY 113: General Physics Laboratory (SQ) OR PHY 112: General Physics (SQ) AND PHY 114: General Physics Laboratory (SQ) | 4 |  |  |
| MET 302: Welding Survey | 3 |  |  |

1. Complete First-Year Composition requirement.

1 Complete Mathematics (MA) requirement.
4 Complete MAT, STP course(s).
Complete PHY, CHM course(s).
Complete MET 211, MET 231 course(s).

| Term 4 45-60 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 MET 213: Applied Mechanics of Materials | 3 |  |  |
| 4. STP 420: Introductory Applied Statistics (CS) | 3 |  |  |
| EST 210: Circuit Analysis I | 3 |  |  |
| MET 214: Applied Mechanics of Materials Laboratory | 1 |  |  |
| Literacy and Critical Inquiry (L) OR <br> ENG 301: Writing for the Professions (L) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| (1) Complete MATH course(s). |  |  |  |
| Complete SCIENCE course(s). |  |  |  |
| 1. Complete MET 213 course(s). |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 61-77 Credit Hours | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| MET 300: Applied Material Science | 3 |  |  |
| MET 309: Nondestructive Testing and Quality Assurance | 1 |  |  |
| MET 331: Machine Design I | 3 |  |  |
| MET 340: Engineering Thermo-Fluids I | 3 |  |  |
| MET 396: Professional Orientation | 1 |  |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 6 78 - 95 Credit Hours | Hours | Minimum Grade | Notes |
| MET 341: Manufacturing Analysis | 3 |  |  |
| MET 344: Casting and Forming Processes | 3 |  |  |
| MET 345: Advanced Manufacturing Processes | 3 |  |  |
| MET 351: Introduction to Automation | 3 |  |  |
| MET 409: Applied Engineering Economics | 3 |  |  |
| Upper Division Social and Behavioral Sciences (SB) OR Upper Division Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Term hours subtotal: | 18 |  |  |
| Term 7 96-113 Credit Hours | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| MET 410: Manufacturing Resource Management | 3 |  |  |
| MET 416: Applied Computer-Integrated Manufacturing (CS) | 3 |  |  |
| MET 442: Specialized Production Processes | 3 |  |  |
| MET 443: CNC Computer Programming | 3 |  |  |
| MET 460: Capstone Project I | 3 |  |  |
| TWC 446: Technical and Scientific Reports (L) | 3 |  |  |
| Term hours subtotal: | 18 |  |  |
| Term 8 114-128 Credit Hours | Hours | Minimum Grade | Notes |
| MET 401: Quality Assurance | 3 |  |  |
| MET 444: Production Tooling | 3 |  |  |

MET 461: Capstone Project II 3

Total Hours: 128
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Manufacturing Engineering Technology (Mechanical), BS

College of Technology and Innovation
Campus:Polytechnic WUE
TSMETMBS

| Term 1 0-14 Credit Hours Critical course signified by 9 | Hours | $\begin{gathered} \text { Minimum } \\ \text { Grade } \end{gathered}$ | Notes |
| :---: | :---: | :---: | :---: |
| MAT 170: Precalculus (MA) OR MAT 265: Calculus for Engineers I (MA) | 3 | C | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students <br> - MET 150 is only offered in fall semesters. Students are strongly encouraged to enroll in MET 150 in their first fall semester at ASU. <br> - Students complete one of the following sequences: a) MAT 170 , MAT 265 , MAT 266 , and STP 420 OR b) MAT 265 , MAT 266, MAT 274/275, and STP 420 |
| MET 150: Introduction to Engineering Technology OR MET 160: CADD and Solid Modeling | 1-2 |  |  |
| CHM 113: General Chemistry I (SQ) OR <br> PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) OR <br> PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) | 4 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| 1. Complete MAT, STP course(s). |  |  |  |
| 4 Complete PHY, CHM course(s). |  |  |  |
| 4 Complete MET course(s). |  |  |  |
| Term hours subtotal: | 14-15 |  |  |
| Term 2 15-28 Credit Hours Critical course signified by 9 | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| 1 MET 160: CADD and Solid Modeling | 2 |  |  |
| 4 MET 230: Introduction to Engineering Materials | 2 |  |  |
| MAT 265: Calculus for Engineers I (MA) OR MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| CHM 113: General Chemistry I (SQ) OR <br> PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) OR <br> PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) | 4 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 Complete MAT, STP course(s). |  |  |  |
| 9 Complete PHY, CHM course(s). |  |  |  |
| 1. Complete MET course(s). |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 29-44 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | $\begin{aligned} & \text { Minimum } \\ & \text { Grade } \end{aligned}$ | Notes |
| 4 MET 211: Statics | 3 |  |  |
| 4. MET 231: Manufacturing Processes | 3 |  |  |
| MAT 266: Calculus for Engineers II (MA) OR MAT 275: Modern Differential Equations (MA) | 3 |  |  |
| CHM 113: General Chemistry I (SQ) OR <br> PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) OR <br> PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) | 4 |  |  |
| MET 302: Welding Survey | 3 |  |  |

Complete First-Year Composition requirement.
1 Complete Mathematics (MA) requirement.
4 Complete MET 211 course(s).
Complete MAT , STP course(s).
Complete PHY , CHM course(s).

| Term 4 45-60 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 MET 213: Applied Mechanics of Materials | 3 |  |  |
| 1. STP 420: Introductory Applied Statistics (CS) | 3 |  |  |
| EST 210: Circuit Analysis I | 3 |  |  |
| MET 214: Applied Mechanics of Materials Laboratory | 1 |  |  |
| ENG 301: Writing for the Professions (L) OR Literacy and Critical Inquiry (L) | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Global Awareness (G) | 3 |  |  |
| 4 Complete MET 213 course(s). |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 61-77 Credit Hours | Hours | Minimum Grade | Notes |
| MET 300: Applied Material Science | 3 |  |  |
| MET 309: Nondestructive Testing and Quality Assurance | 1 |  |  |
| MET 331: Machine Design I | 3 |  |  |
| MET 340: Engineering Thermo-Fluids I | 3 |  |  |
| MET 396: Professional Orientation | 1 |  |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 6 78-95 Credit Hours | Hours | Minimum Grade | Notes |
| MET 341: Manufacturing Analysis | 3 |  |  |
| MET 344: Casting and Forming Processes | 3 |  |  |
| MET 345: Advanced Manufacturing Processes | 3 |  |  |
| MET 351: Introduction to Automation | 3 |  |  |
| MET 409: Applied Engineering Economics | 3 |  |  |
| Upper Division Social and Behavioral Sciences (SB) OR Upper Division Humanities, Fine Arts and Design (HU) | 3 |  |  |
| Term hours subtotal: | 18 |  |  |
| Term 7 96-113 Credit Hours | Hours | Minimum Grade | Notes |


| MET 410: Manufacturing Resource Management | 3 |
| :--- | :--- |
| MET 416: Applied Computer-Integrated Manufacturing (CS) | 3 |
| MET 434: Engineering Thermo-Fluids III | 3 |
| MET 443: CNC Computer Programming | 3 |
| MET 460: Capstone Project I | 3 |
| TWC 446: Technical and Scientific Reports (L) | 3 |
|  | Term hours subtotal: |


| Term 8 | $114-128$ Credit Hours | Hours | Minimum <br> Grade |
| :--- | :--- | :--- | :--- |
| MET 401: Quality Assurance | 3 |  |  |
| MET 438: Machine Design II | 3 |  |  |
| MET 444: Production Tooling | 3 |  |  |
| MET 461: Capstone Project II | 3 |  |  |
| MET OR AET OR EST OR ALT OR EET OR UET Upper Division Elective | 3 |  |  |
| Academic Catalog Archive 2011-2012 1677 |  |  |  |

Total Hours: 128
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011－2012 Major Map

## Mechanical Engineering Technology，BS

College of Technology and Innovation
Campus：Polytechnic WU⿴囗十⺝刂
TSMECBS

| Term 1 0－15 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MET 150：Introduction to Engineering Technology OR MET 160：CADD and Solid Modeling | 1－2 |  | －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> －ASU 101 or College specific equivalent First Year Seminar required of all freshman students <br> －MET 150 is only offered in fall semesters．Students are strongly encouraged to enroll in MET 150 in their first fall semester at ASU． <br> －Students complete one of the following sequences：a）MAT 170，MAT 265 ，MAT 266 ，and STP 420 OR b）MAT 265，MAT 266，MAT 274／275，and STP 420 |
| MAT 170：Precalculus（MA）OR MAT 265：Calculus for Engineers I（MA） | 3 | C |  |
| 4 CHM 113：General Chemistry I（SQ） | 4 |  |  |
| PHY 111：General Physics（SQ）AND <br> PHY 113：General Physics Laboratory（SQ） | 4 |  |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students | 3 | C |  |
| 4 Complete MAT，STP course（s）． |  |  |  |
| 4 Complete PHY，CHM course（s）． |  |  |  |
| 4 Complete MET，AET course（s）． |  |  |  |
| Term hours subtotal： | 15－16 |  |  |
| Term 2 16－29 Credit Hours Critical course signified by 4 | Hours | Minimum Grade | Notes |
| 1 MET 160：CADD and Solid Modeling | 2 |  |  |
| 4 MET 230：Introduction to Engineering Materials | 2 |  |  |
| CHM 113：General Chemistry I（SQ）OR <br> PHY 111：General Physics（SQ）AND <br> PHY 113：General Physics Laboratory（SQ）OR <br> PHY 112：General Physics（SQ）AND <br> PHY 114：General Physics Laboratory（SQ） | 4 |  |  |
| MAT 265：Calculus for Engineers I（MA）OR MAT 266：Calculus for Engineers II（MA） | 3 | C |  |
| ENG 101 or ENG 102：First－Year Composition OR ENG 105：Advanced First－Year Composition OR ENG 107 or ENG 108：English for Foreign Students | 3 | C |  |
| 4 Complete MAT ，STP course（s）． |  |  |  |
| 4 Complete MET，AET course（s）． |  |  |  |
| 4 Complete PHY，CHM course（s）． |  |  |  |
| Term hours subtotal： | 14 |  |  |
| Term 3 30－44 Credit Hours Critical course signified by ${ }^{\text {d }}$ | Hours | Minimum Grade | Notes |
| 4 MET 211：Statics | 3 |  |  |
| MAT 266：Calculus for Engineers II（MA）OR <br> MAT 274：Elementary Differential Equations（MA） | 3 |  |  |
| AET 210：Measurements and Testing | 3 |  |  |
| MET 231：Manufacturing Processes | 3 |  |  |
| Humanities，Fine Arts and Design（HU）AND Global Awareness（G） | 3 |  |  |
| 4 Complete First－Year Composition requirement． |  |  |  |

Complete MAT , STP course(s).
4 Complete MET 211 course(s).
Complete PHY , CHM course(s).
Term hours subtotal: 15

| Term 4 45-60 Credit Hours Critical course signified by ${ }^{\text {¢ }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 MET 213: Applied Mechanics of Materials | 3 |  |  |
| 1. STP 420: Introductory Applied Statistics (CS) | 3 |  |  |
| MET 214: Course not found | 1 |  |  |
| MET 345: Advanced Manufacturing Processes | 3 |  |  |
| EST 210: Circuit Analysis I | 3 |  |  |
| ENG 301: Writing for the Professions (L) OR Literacy and Critical Inquiry (L) | 3 |  |  |
| 4 Complete MAT course(s). |  |  |  |
| 4 Complete MET 213 course(s). |  |  |  |
| 4 Complete MET, AET course(s). |  |  |  |
| 4 Complete SCIENCE course(s). |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 61-77 Credit Hours | Hours | Minimum Grade | Notes |
| MET 212: Applied Engineering Mechanics: Dynamics | 3 |  |  |
| MET 300: Applied Material Science | 3 |  |  |
| MET 309: Nondestructive Testing and Quality Assurance | 1 |  |  |
| MET 331: Machine Design I | 3 |  |  |
| MET 340: Engineering Thermo-Fluids I | 3 |  |  |
| MET 396: Professional Orientation | 1 |  |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |

Term 678 - 95 Credit Hours $\quad$ Hours | Minimum |
| :---: |
| Grade |

| MET 409: Applied Engineering Economics | 3 |
| :--- | :---: |
| MET 432: Engineering Thermo-Fluids II | 3 |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |
| MET 351: Introduction to Automation | 3 |
| MET 418: Composites Materials Manufacturing | 3 |
| Upper Division Technical Elective | Term hours subtotal: |


| Term 7 96-113 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MET 460: Capstone Project I | 3 |  |  |
| TWC 446: Technical and Scientific Reports (L) | 3 |  |  |
| MET 434: Engineering Thermo-Fluids III | 3 |  |  |
| MET OR AET OR EST OR ALT OR EET OR UET Upper Division Elective | 3 |  |  |
| Upper Division Technical Elective | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 18 |  |  |
| Term 8 114-128 Credit Hours | Hours | Minimum Grade | Notes |
| MET 401: Quality Assurance | 3 |  |  |
| MET 461: Capstone Project II | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| MET 438: Machine Design II | 3 |  |  |

## - Mechanical

- MET 351 (3) Introduction to Automation, pre-requisite: EST 210 (Spring)
- MET 418 (3) Composites Materials Manufacturing, pre-requisite: MET 300(Spring)
- MET 434 (3) Engineering Thermo-Fluids III, pre-requisite: MET 340 (Fall)
- MET 438 (3) Machine Design II, pre-requisite: MET 331(Spring)
- MET 440 (3) Finite Element Analysis, pre-requisite: MET 331 (Spring)
- Technical Elective (3)
- Technical Electives

This program requires technical electives which are courses in the department that are not required for the major and concentration. Students can select from upper division courses in MET, AET, EST, ALT, EET, UET.
Upper Division Technical Elective
AET Upper Division Elective
ALT Upper Division Elective
EET Upper Division Elective
EST Upper Division Elective
MET Upper Division Elective
UET Upper Division Elective

Total Hours: 128
Upper Division Hours: 45 minimum

## Major GPA: 2.00 minimum

Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

2011-2012 Major Map Mechanical Engineering Technology (Aeronautical Engineering Technology), BS

College of Technology and Innovation
Campus: Polytechnic
TSMECEBS

| Term $10-15$ Credit Hours Critical course signified by ${ }^{(4)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MET 150: Introduction to Engineering Technology OR MET 160: CADD and Solid Modeling | 1-2 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent $F$ irst Year Seminar required of all freshman students <br> - MET 150 is only offered in fall semesters. Students are strongly encouraged to enroll in MET 150 in their first fall semester at ASU. <br> - Students complete one of the following sequences: <br> a) MAT 170, MAT 265 , MAT 266, and STP 420 OR b) MAT 265, MAT 266, MAT 274/275, and STP 420 |
| MAT 170: Precalculus (MA) OR MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| (4) CHM 113: General Chemistry I (SQ) | 4 |  |  |
| PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) | 4 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| (4) Complete MAT, STP course(s). |  |  |  |
| (4. Complete PHY, CHM course(s). |  |  |  |
| (4) Complete MET, AET course(s). |  |  |  |
| Term hours subtotal: | 15-16 |  |  |


| Term 2 16-29 Credit Hours Critical course signified by ${ }^{(4)}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| (-) MET 160: CADD and Solid Modeling | 2 |  |  |
| (4) MET 230: Introduction to Engineering Materials | 2 |  |  |
| MAT 265: Calculus for Engineers I (MA) OR MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| CHM 113: General Chemistry I (SQ) OR <br> PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) OR <br> PHY 112: General Physics (SQ) AND <br> PHY 114: General Phy sics Laboratory (SQ) | 4 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| (1) Complete MAT, STP course(s). |  |  |  |
| (4. Complete PHY, CHM course(s). |  |  |  |
| (4) Complete MET, AET course(s). |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 30-44 Credit Hours Critical course signified by ${ }^{(6)}$ | Hours | Minimum Grade | Notes |

$\left.\begin{array}{llll}\hline \text { 4. } \text { MET 211: Statics } & 3 \\ \hline \text { MAT 26: Calculus for Engineers II (MA) OR } \\ \text { MAT 275: Modern Differential Equations(MA) }\end{array}\right)$

| AET 215: Aircraft Systems | 2 |
| :--- | :--- |
| MET 213: Applied Mechanics of Materials | 3 |
| STP 420: Introductory Applied Statistics (CS) | 3 |
| EST 210: Circuit Analysis I | 3 |
| MET 214: Applied Mechanics of Materials Laboratory | 1 |

```
Complete MATH course(s)
```

Complete SCIENCE course(s).
(4) Complete MAT, STP course(s).
(-) Complete MET 213 course(s).
Term hours subtotal: 15

| Term 5 60-76Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MET 212: Applied Engineering Mechanics: Dynamics | 3 |  |  |
| MET 300: Applied Material Science | 3 |  |  |
| MET 309: Nondestructive Testing and Quality Assurance | 1 |  |  |
| MET 331: Machine Design I | 3 |  |  |
| MET 340: Engineering Thermo-Fluids I | 3 |  |  |
| MET 396: Professional Orientation | 1 |  |  |
| AET 300: Aircraft Design I | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term6 77-94 Credit Hours | Hours | Minimum Grade | Notes |
| MET 409: Applied Engineering Economics | 3 |  |  |
| MET 432: Engineering Thermo-Fluids II | 3 |  |  |
| MET 418: Composites Materials Manufacturing | 3 |  |  |
| Upper Division Technical Elective | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 18 |  |  |
| Term 7 95-112 Credit Hours | Hours | Minimum Grade | Notes |


| ENG 301: Writing for the Professions (L) OR Literacy and Critical Inquiry (L) | 3 |
| :--- | :--- |
| MET 460: Capstone Project I | 3 |
| Upper Division Technical Elective | 3 |
| TWC 446: Technical and Scientific Reports (L) | 3 |
| AET 417: Aerospace Structures | 3 |
| MET 434: Engineering Thermo-Fluids III |  |
|  | Term hours subtotal: |


| Term 8 | $113-128$ Credit Hours | Hours | Minimum <br> Grade | Notes |
| :--- | :--- | :--- | :--- | :--- |


| MET 401: Quality Assurance | 3 |  |
| :--- | :--- | :--- |
| MET 461: Capstone Project II | 3 |  |
| AET 415: Gas Dynamics and Propulsion | 3 |  |
| AET 420: Experimental Aerodynamics and W ind Tunnels | 1 |  |
| Upper Division Humanities, Fine Arts and Design (HU) <br> Upper Division Social and Behavioral Sciences (SB) | 3 |  |
| Social and Behavioral Sciences (SB) |  | 3 |
|  | Term hours subtotal: | 16 |

- Technical Electives

This program requires technical electives which are courses in the department that are not required for the major and concentration. Students can select from upper division courses in MET, AET, EST, ALT, EET, UET.

- Aeronautical Concentration
$\begin{array}{llll}\text { - } & \text { AET } & 215(2) & \text { Aircraft Systems, (Spring) } \\ \text { - } & \text { AET } & 300(3) & \text { Aircraft }\end{array}$
- AET 300 (3) Aircraft Design I, pre-requisite: AET 215, MET 211 (Fall)
- AET 415 (3) Gas Dynamics and Propulsion, pre-requisite: MET 432 (Spring)
- AET 417 (3) Aerospace Structures, pre-requisite: MET 213, MET 212, AET 300 (Fall)
- AET 420 (1) Experimental Aerodynamics and Wind Tunnels, pre-requisite: AET 300, MET 432 (Spring)
- MET 418 (3) Composites Materials Manufacturing, pre-requisite: MET 300 (Spring)
- MET 434 (3) Engineering Thermo Fluids III, pre-requisite: MET 432 (Fall)

[^27]Total Hours: 128
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64
maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map

## Mechanical Engineering Technology (Automation Engineering Technology), BS

College of Technology and Innovation
Campus:Polytechnic WUE
TSMECUBS


Complete MAT , STP course(s).
Complete PHY, CHM course(s).
Complete MET , AET course(s).
Term hours subtotal:
15

| Term 4 45-60 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4. MET 213: Applied Mechanics of Materials | 3 |  |  |
| 4 STP 420: Introductory Applied Statistics (CS) | 3 |  |  |
| EST 210: Circuit Analysis I | 3 |  |  |
| MET 214: Course not found | 1 |  |  |
| MET 345: Advanced Manufacturing Processes | 3 |  |  |
| ENG 301: Writing for the Professions (L) OR Literacy and Critical Inquiry (L) | 3 |  |  |
| 4 Complete MATH course(s). |  |  |  |
| 4 Complete SCIENCE course(s). |  |  |  |
| 4 Complete MAT, STP course(s). |  |  |  |
| Complete MET 213 course(s). |  |  |  |
| Complete MET , AET course(s). |  |  |  |
| Term hours subtotal: | 16 |  |  |
| Term 5 61-77 Credit Hours | Hours | Minimum Grade | Notes |
| MET 212: Applied Engineering Mechanics: Dynamics | 3 |  |  |
| MET 300: Applied Material Science | 3 |  |  |
| MET 309: Nondestructive Testing and Quality Assurance | 1 |  |  |
| MET 331: Machine Design I | 3 |  |  |
| MET 340: Engineering Thermo-Fluids I | 3 |  |  |
| MET 396: Professional Orientation | 1 |  |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 6 78-95 Credit Hours | Hours | Minimum Grade | Notes |
| MET 409: Applied Engineering Economics | 3 |  |  |
| MET 432: Engineering Thermo-Fluids II | 3 |  |  |
| MET 341: Manufacturing Analysis | 3 |  |  |
| MET 351: Introduction to Automation | 3 |  |  |
| Upper Division Technical Elective | 3 |  |  |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Term hours subtotal: | 18 |  |  |
| Term 7 96-113 Credit Hours | Hours | Minimum Grade | Notes |
| MET 460: Capstone Project I | 3 |  |  |
| TWC 446: Technical and Scientific Reports (L) | 3 |  |  |
| MET 416: Applied Computer-Integrated Manufacturing (CS) | 3 |  |  |
| MET 455: Automation Systems Integration | 3 |  |  |
| Upper Division Technical Elective | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 18 |  |  |
| Term 8 114-128 Credit Hours | Hours | Minimum Grade | Notes |
| MET 401: Quality Assurance | 3 |  |  |
| MET 461: Capstone Project II | 3 |  |  |
| MET 438: Machine Design II | 3 |  |  |

[^28]- Automation
- MET ÂÂÂ 341 (3)ÂÂÂ Manufacturing Analysis, pre-requisite: MET 231 (Spring)
- MET ÂÂÂ 351 (3)ÂÂÂ Introduction to Automation, pre-requisite: EST 210 (Spring)
- MET ÂÂÂ 416 (3)ÂÂÂ Applied Computer-Integrated Manufacturing, pre-requisite: MET 341 (Fall)
- MET ÂÂÂ 438 (3)ÂÂÂ Machine Design II, pre-requisite: MET 331 (Spring)
- MET ÂÂÂ 455 (3)ÂÂÂ Automation Systems Integration, pre-requisite: MET 351 (Fall)
- Technical Elective (3)
- Technical Electives

This program requires technical electives which are courses in the department that are not required for the major and concentration. Students can select from upper division courses in MET, AET, EST, ALT, EET, UET.
Upper Division Technical Elective
AET Upper Division Elective
ALT Upper Division Elective
EET Upper Division Elective
EST Upper Division Elective
MET Upper Division Elective
UET Upper Division Elective

Total Hours: 128
Upper Division Hours: 45 minimum Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

## Hrs Resident Credit for

Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 2011-2012 Major Map Mechanical Engineering Technology (Automotive), BS

College of Technology and Innovation
Campus:Polytechnic WUE
TSMECTBS

| Term 1 0-15 Credit Hours Critical course signified by ${ }^{\text {1 }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MET 150: Introduction to Engineering Technology OR MET 160: CADD and Solid Modeling | 1-2 |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students <br> - MET 150 is only offered in fall semesters. Students are strongly encouraged to enroll in MET 150 in their first fall semester at ASU. <br> - Students complete one of the following sequences: a) MAT 170 , MAT 265 , MAT 266 , and STP 420 OR b) MAT 265 , MAT 266, MAT 274/275, and STP 420 |
| MAT 170: Precalculus (MA) OR MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| 4 CHM 113: General Chemistry I (SQ) | 4 |  |  |
| PHY 111: General Physics (SQ) AND PHY 113: General Physics Laboratory (SQ) | 4 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 Complete MAT, STP course(s). |  |  |  |
| 4 Complete MET, AET course(s). |  |  |  |
| 4 Complete PHY, CHM course(s). |  |  |  |
| Term hours subtotal: | 15-16 |  |  |
| Term 2 16-29 Credit Hours Critical course signified by ${ }^{(1)}$ | Hours | Minimum Grade | Notes |
| 4 MET 160: CADD and Solid Modeling | 2 |  |  |
| 4 MET 230: Introduction to Engineering Materials | 2 |  |  |
| MAT 265: Calculus for Engineers I (MA) OR MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| CHM 113: General Chemistry I (SQ) OR <br> PHY 111: General Physics (SQ) AND <br> PHY 113: General Physics Laboratory (SQ) OR <br> PHY 112: General Physics (SQ) AND <br> PHY 114: General Physics Laboratory (SQ) | 4 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| 4 Complete MAT, STP course(s). |  |  |  |
| Complete MET, AET course(s). |  |  |  |
| Complete PHY, CHM course(s). |  |  |  |
| Term hours subtotal: | 14 |  |  |
| Term 3 30-44 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| 1. MET 211: Statics | 3 |  |  |
| MAT 266: Calculus for Engineers II (MA) OR MAT 275: Modern Differential Equations (MA) | 3 |  |  |
| AET 210: Measurements and Testing | 3 |  |  |
| MET 231: Manufacturing Processes | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Global Awareness (G) | 3 |  |  |
| 4 Complete First-Year Composition requirement. |  |  |  |

Complete MAT , STP course(s).
Complete MET , AET course(s).
Complete PHY, CHM course(s).
Term hours subtotal: 15

| Term 4 45-63 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 1 STP 420: Introductory Applied Statistics (CS) | 3 |  |  |
| 1 MET 213: Applied Mechanics of Materials | 3 |  |  |
| EST 210: Circuit Analysis I | 3 |  |  |
| MET 214: Applied Mechanics of Materials Laboratory | 1 |  |  |
| MET 345: Advanced Manufacturing Processes | 3 |  |  |
| MET 340: Engineering Thermo-Fluids I | 3 |  |  |
| ENG 301: Writing for the Professions (L) OR Literacy and Critical Inquiry (L) | 3 |  |  |
| 4 Complete MATH course(s). |  |  |  |
| Complete SCIENCE course(s). |  |  |  |
| Complete MAT , STP course(s). |  |  |  |
| Complete MET 213 course(s). |  |  |  |
| Term hours subtotal: | 19 |  |  |
| Term 5 64-80 Credit Hours | Hours | Minimum Grade | Notes |
| MET 212: Applied Engineering Mechanics: Dynamics | 3 |  |  |
| MET 300: Applied Material Science | 3 |  |  |
| MET 309: Nondestructive Testing and Quality Assurance | 1 |  |  |
| MET 331: Machine Design I | 3 |  |  |
| MET 396: Professional Orientation | 1 |  |  |
| MET 321: Introduction to Automotive Engineering | 3 |  |  |
| Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |

Term $681-98$ Credit Hours $\quad 81$ Hours | Minimum |
| :---: |
| Grade |

| MET 409: Applied Engineering Economics | 3 |
| :--- | :---: |
| MET 432: Engineering Thermo-Fluids II | 3 |
| MET 421: Vehicle Powertrains | 3 |
| MET 423: Vehicle Chassis and Running Gear Design | 3 |
| TWC 446: Technical and Scientific Reports (L) | 3 |
| Social and Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) | 3 |
|  | Term hours subtotal: |


| Term 7 99-113 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| MET 460: Capstone Project I | 3 |  |  |
| MET 424: Vehicle Electrical Systems | 3 |  |  |
| MET 426: Vehicle Thermal Design | 3 |  |  |
| MET 434: Engineering Thermo-Fluids III | 3 |  |  |
| Social and Behavioral Sciences (SB) | 3 |  |  |
|  | Term hours subtotal: 15 |  |  |
| Term 8 114-128 Credit Hours | Hours | Minimum Grade | Notes |
| MET 401: Quality Assurance | 3 |  |  |
| MET 461: Capstone Project II | 3 |  |  |
| MET 427: Vehicle System Integration and Testing | 3 |  |  |
| Upper Division Technical Elective | 3 |  |  |

- Technical Electives

This program requires technical electives which are courses in the department that are not required for the major and concentration. Students can select from upper division courses in MET, AET, EST, ALT, EET, UET

- Automotive
- MET 321 (3) Introduction to Automotive Engineering, pre-requisite: MET 212, MET 213, MET 340 (Fall)
- MET 421 (3) Vehicle Powertrains, pre-requisite: MET 212, MET 213, MET 340 (Spring)
- MET 423 (3) Vehicle Chassis and Running Gear Design, pre-requisite: MET 212, MET 331 (Spring)
- MET 424 (3) Vehicle Electrical Systems, pre-requisite: EST 210, MET 321, MET 421 (Fall)
- MET 426 (3) Vehicle Thermal Design, pre-requisite: MET 421, pre or co-requisite: MET 434 (Fall)
- MET 427 (3) Vehicle System Integration and Testing, pre-requisite: MET 423, MET 424 (Spring)
- Designated Technical Elective: MET 434 (3) Engineering Thermo-Fluids III, pre-requisite: MET 432 (Fall)
Upper Division Technical Elective
AET Upper Division Elective
ALT Upper Division Elective
EET Upper Division Elective
EST Upper Division Elective
MET Upper Division Elective
UET Upper Division Elective

Total Hours: 128
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## 4 1 ARIZONA State UNIVERSITY

## 2011-2012 Major Map Software Engineering, BS

College of Technology and Innovation Campus:Polytechnic
TSSERBS

| Term 1 0-13 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 EGR 101: Introduction to Engineering Design I | 3 | C | - ASU 101 or College specific equivalent First Year Seminar required of all freshman students <br> - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - PHY 121/122 may be taken in term 1 if student has AP credit for MAT 265. <br> - EGR 104 may be taken in term 2 if PHY 121/122 taken in term 1. <br> - Must complete a MAT $* * *$ course. |
| 4 MAT 265: Calculus for Engineers I (MA) | 3 | C |  |
| ASU 101: The ASU Experience | 1 |  |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 |  |  |
| Term hours subtotal: | 13 |  |  |


| Term 2 14-29 Credit Hours Critical course signified by ${ }^{\text {P }}$ | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| 4 EGR 102: Introduction to Engineering Design II | 3 | C | - Must Complete MAT 265: Calculus for Engineers I. <br> - For students who have completed MAT 265 with AP credit can take PHY 121/122 in term 1. |
| 4. MAT 266: Calculus for Engineers II (MA) | 3 | C |  |
| 1 SER 232: Computer Systems Fundamentals: Structures | 3 | C |  |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students | 3 | C |  |
| PHY 121: University Physics I: Mechanics (SQ) AND PHY 122: University Physics Laboratory I (SQ) | 4 | C |  |
| Term hours subtotal: | 16 |  |  |
| Term 3 30-45 Credit Hours Critical course signified by | Hours | Minimum Grade | Notes |


| 1 SER 294: Software Fundamentals: Languages and Environments | 3 | C |
| :--- | :--- | :--- |
| SER 294: Software Engineering | 1 |  |
| SER 294: Software Enterprise I | 3 | C |
| EGR 280: Engineering Statistics (CS) | 3 |  |
| SER 203: Mathematics of Computing OR | 3 |  |
| MAT 243: Discrete Mathematical Structures | 3 |  |
| Social and Behavioral Sciences (SB) |  |  |
| Complete First-Year Composition requirement |  |  |

- Must complete MAT 266:

Calculus for Engineers II.

- SER 294 may be taken in term 1

| Term 4 | 46-60 Credit Hours Critical course signified by | Hours |
| :--- | :--- | :---: |
| EGR 104: Critical Inquiry in Engineering (L) | Minimum <br> Grade |  |
| SER 294: Software Fundamentals: Algorithms | 3 | C |
| SER 216: Software Enterprise II | 3 | C |
| SER 234: Computer Systems Fundamentals II: Systems | 3 | C |


| Term 5 61-77 Credit Hours | Hours | Minimum Grade | Notes |
| :---: | :---: | :---: | :---: |
| SER 394: Software Enterprise III | 2 |  |  |
| SER 394: Software Systems | 3 |  |  |
| SER 394: Software Enterprise \& Focus Project I | 2 |  |  |
| HST 318: History of Engineering ((L or SB) \& G) | 3 |  |  |
| $\begin{aligned} & \text { Natural Science - Quantitative (SQ) OR } \\ & \text { Natural Science - General (SG) } \end{aligned}$ | 4 |  |  |
| Secondary Focus Area | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 6 78-90 Credit Hours | Hours | Minimum Grade | Notes |
| SER 394: Software Enterprise IV | 2 |  |  |
| SER 394: Software Enterprise \& Focus Project II | 2 |  |  |
| SER 394: Primary Focus | 3 |  |  |
| MAT 343: Applied Linear Algebra | 3 |  |  |
| Secondary Focus Area | 3 |  |  |
| Term hours subtotal: | 13 |  |  |
| Term 7 91-107 Credit Hours | Hours | Minimum Grade | Notes |
| SER 415: Software Enterpirse V* | 2 |  | - *Upper Division Literacy Designation approval needed. <br> - 4 credits of Math or Science electives needed, may take in Term 7 or Term 8. |
| SER 494: Soft Enterprise \& Focus Project III* | 2 |  |  |
| SER 494: Primary Focus Area III | 3 |  |  |
| MATH Elective OR SCIENCE Elective | 4 |  |  |
| Upper Division Secondary Focus Area | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) AND Historical Awareness (H) | 3 |  |  |
| Term hours subtotal: | 17 |  |  |
| Term 8 108-120 Credit Hours | Hours | Minimum Grade | Notes |
| SER 494: Software Enterprise IV | 2 |  |  |
| SER 494: Software Enterprise \& Focus Project IV | 2 |  |  |
| SER 494: Primary Focus IV | 3 |  |  |
| Upper Division Secondary Focus Area | 3 |  |  |
| Upper Division Humanities, Fine Arts and Design (HU) OR Upper Division Social and Behavioral Sciences (SB) | 3 |  |  |
| Term hours subtotal: | 13 |  |  |

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for
Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum

## General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies designations listed on the major map are current for the 2011-2012 academic year.

## Major Map: Technological Entrepreneurship and <br> Management - Bachelor of Science (B.S.) <br> College of Technology \& Innovation | Catalog Year: 2010-2011



| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN：91－105 CREDIT HOURS |  |  |  |  |  |
| TWC 400：Technical Communications（L） | 3 | 囚 |  |  |  |
| OMT 461：Operations Management | 3 | 区 |  |  |  |
| OMT 480：Organizational Effectiveness | 3 | 囚 |  |  |  |
| OMT 445：Industrial Internship | 3 | 区 |  |  |  |
| Technical Elective | 3 | $\square$ |  |  |  |
| TERM EIGHT：106－120 CREDIT HOURS |  |  |  |  |  |
| OMT 402：Legal Issues for Technologists | 3 | 区 |  |  |  |
| OMT 440：Introduction to International Business | 3 | 囚 |  |  |  |
| TMC 470：Project Management | 3 | 囚 |  |  |  |
| TMC 480：Senior Project | 3 | 区 |  |  |  |
| Technical Elective | 2 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for <br> Academic Recognition <br> $(56$ minimum $)$ | Major GPA（2．000 <br> Min．） | Total UD Hrs（45 <br> minimum） | Total Comm．College <br> Hrs．（64 maximum） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

General University Requirements：Legend
－General Studies Core Requirements：
－Literacy and Critical Inquiry（L）
－Mathematical Studies（MA）
－Computer／Statistics／Quantitative applications（CS）
－Humanities，Fine Arts，and Design（HU）
－Social and Behavioral Sciences（SB）
－Natural Science－Quantitative（SQ）
－Natural Science－General（SG）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）
－Global Awareness（G）
－Historical Awareness（H）
－First－Year Composition
Additional Notes：


## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total UD Hours <br> (minimum 45) | Cumulative GPA <br> $(2.00$ minimum) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Total Community College Hrs <br> (maximum 64) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)

Humanities, Fine Arts, and Design (HU)

- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition


## Additional Notes:

A listing of all ASU majors that track into the Health \& Life Sciences major track is available online: $\underline{\text { http: } / / u c . a s u . e d u / a d v i s i n g / m a j o r s} / \mathrm{hls} . \mathrm{html}$

Major Map : Exploratory Humanities, Fine Arts \& Design University College | Catalog Year: 2011-2012

|  |  |  | Competed Transfer Pathway: |  | Completed General Education:$\square$ AGEC $\quad \square$ IGETC/CSUGE |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\square$ MAPP | AG $\square$ ATP $\square$ None |  |
| Course Subject and Title (courses in bold/shading are critical) | Hrs. | Upper Division | Transfer Course/Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| TERM ONE: 0-15 CREDIT HOURS |  |  |  |  |  |
| ASU 101: The ASU Experience | 1 | $\square$ |  |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Complete first course in First-Year Composition (WAC 101 or ENG 101 or ENG 107 or ENG 105) |
| UNI 150: Special Topics: Career \& Major Exploration | 1 | $\square$ |  | Grade of C |  |
| WAC 101: Introduction to Academic Writing OR <br> WAC 107: Intro to Academic Writing for International Students OR <br> ENG 101 or 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107 or 108: English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| Humanities/Fine Arts/Design (HU) <br> (One that is appropriate for majors of interest) | 3 | $\square$ |  | Grade of C |  |
| Natural Science (SQ/SG) | 3 | $\square$ |  |  |  |
| Humanities/Fine Arts (HU) or Social/Behavioral Science (SB) with Awareness Area ( C or G or H ) or Second Language (One that is appropriate for majors of interest) | 3-4 | $\square$ |  |  |  |
| TERM TWO: 16-30 CREDIT HOURS |  |  |  |  |  |
| UNI 250: Special Topics: Choosing a major | 1 | $\square$ |  | Grade of C | - Completed ENG 101/107/105 "C" or better |
| ENG 101 or 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or 108: English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| Humanities/Fine Arts/Design (HU) or Social/Behavioral Science (SB) | 3 | $\square$ |  | Grade of C |  |
| Mathematical Studies (MA) | 3 | $\square$ |  |  |  |
| Humanities/Fine Arts/Design (HU) or Social/Behavioral Science (SB) with Awareness Area ( C or G or H ) or Second Language | 3-4 | $\square$ |  |  |  |
| Elective that introduces a new discipline | 3 | $\square$ |  |  |  |
| TERM THREE: 31-45 CREDIT HOURS |  |  |  |  |  |
| UNI 250: Special Topics: Choosing a Major | 1 | $\square$ |  | Grade of C | - Complete First-Year Composition requirement: ENG 101 \& 102 OR ENG 107 \& 108 or 105 <br> - Complete Mathematical Studies (MA) |
| ENG 102: First-Year Composition OR <br> ENG 108: English for Foreign Students OR <br> Literacy and Critical Inquiry (L) OR Humanities/Fine Arts (HU) | 3 | $\square$ |  | Grade of C |  |
| Natural Science (SQ/SG) | 4 | $\square$ |  |  |  |
| Social/Behavioral Science (SB) or Humanities/Fine Arts/Design (HU) | 3 | $\square$ |  |  |  |
| Humanities/Fine Arts/Design (HU) or Social/Behavioral Science (SB) with Awareness Area ( C or G or H ) or Second Language (One that is appropriate for majors of interest) | 3-4 | $\square$ |  |  |  |
| Computer Literacy/Statistics (CS) | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total UD Hours <br> (minimum 45) | Cumulative GPA <br> $(2.00$ minimum $)$ | Total Hrs at ASU <br> $($ minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Total Comm. College Hrs. <br> (maximum 64) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition


## Additional Notes:

A listing of all ASU majors that track into the Humanities, Fine Arts \& Design major track is available online: http://uc.asu.edu/advising/majors/fahd.html

Major Map : Exploratory Math, Physical Sciences, Engineering \& Technology
University College | Catalog Year: 2011-2012


## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total UD Hours <br> $($ minimum 45 $)$ | Cumulative GPA <br> $(2.00$ minimum $)$ | Total Hrs at ASU <br> $($ minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Total Comm. College Hrs. <br> (maximum 64) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition


## Additional Notes:

A listing of all ASU majors that track into the Math, Physical Sciences, Engineering \& Technology major track is available online: http://uc.asu.edu/advising/majors/emtp.html

Major Map : Exploratory Social and Behavioral Sciences University College | Catalog Year: 2011-2012

|  |  |  | Competed Transfer Pathway: <br> $\square$ MAPP $\square$ TAG $\square$ ATP $\square$ None |  | Completed General Education: <br> $\square$ AGEC $\square$ IGETC/CSUGE $\square$ None |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title (courses in bold/shading are critical) | Hrs. | Upper Division | Transfer Course/Grade | Minimum Grade if Required | Additional Critical Tracking Notes |
| TERM ONE: 0-15 CREDIT HOURS |  |  |  |  |  |
| ASU 101: The ASU Experience | 1 | $\square$ |  |  | - An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses <br> - ASU Math Placement Exam score determines placement in Mathematics course <br> - ASU 101 or College specific equivalent First Year Seminar required of all freshman students. <br> - Complete first course in First-Year Composition (WAC 101 or ENG 101 or ENG 107 or ENG 105) |
| UNI 150: Special Topics: Career \& Major Exploration | 1 | $\square$ |  | Grade of C |  |
| WAC 101: Introduction to Academic Writing OR <br> WAC 107: Introduction to Academic Writing for International Students OR <br> ENG 101 or 102: First-Year Composition OR <br> ENG 105: Advanced First-Year Composition OR <br> ENG 107 or 108: English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| Social/Behavioral Science (SB) <br> (One that is appropriate for majors of interest) | 3 | $\square$ |  | Grade of C |  |
| Natural Science (SQ/SG) | 4 | $\square$ |  |  |  |
| Second Language or Social/Behavioral Science (SB) or Awareness Area ( C or G or H ) | 3-4 | $\square$ |  |  |  |
| TERM TWO: 16-30 CREDIT HOURS |  |  |  |  |  |
| UNI 250: Special Topics: Choose a Major | 1 | $\square$ |  | Grade of C | - Completed ENG 101/107/105 "C" or better |
| ENG 101 or 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or 108: English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| Social/Behavioral Science (SB) <br> (One that is appropriate for majors of interest) | 3 | $\square$ |  | Grade of C |  |
| Mathematical Studies (MA) | 3 | $\square$ |  |  |  |
| Second Language or Humanities/Fine Arts/Design (HU) or Awareness Area ( C or G or H ) | 3-4 | $\square$ |  |  |  |
| Elective that introduces a new discipline | 3 | $\square$ |  |  |  |
| TERM THREE: 31-45 CREDIT HOURS |  |  |  |  |  |
| UNI 250: Special Topics: Choosing a Major | 1 | $\square$ |  | Grade of C | - Complete First-Year Composition requirement: ENG 101 \& 102 OR ENG 107 \& 108 or 105 <br> - Complete Mathematical Studies (MA) |
| ENG 102: First-Year Composition OR <br> ENG 108: English for Foreign Students OR <br> Literacy and Critical Inquiry (L) OR <br> Social/Behavioral Science (SB) or Humanities/Fine Arts (HU) - course that is appropriate for majors of interest | 3 | $\square$ |  | Grade of C |  |
| Natural Science (SQ/SG) | 4 | $\square$ |  |  |  |
| Humanities/Fine Arts/Design (HU) | 3 | $\square$ |  |  |  |
| Second Language or Social/Behavioral Science (SB) or Awareness Area (C or G or H) | 3-4 | $\square$ |  |  |  |
| Computer Literacy/Statistics (CS) | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total UD Hours <br> (minimum 45) | Cumulative GPA <br> $(2.00$ minimum) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Total Comm. College Hrs. <br> (maximum 64) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition


## Additional Notes:

- A listing of all ASU majors that track into the Humanities, Fine Arts \& Design major track is available online: http://uc.asu.edu/advising/majors/sbs.html


[^0]:    Steven D. Crow
    Executive Director

[^1]:    ${ }^{(1)}$ Resident tuition for enrollment in 7 hours or more is a $\$ 1$ less during Spring semester. The Financial Aid Trust fee is $\$ 1$ less during Spring semester for enrollment in less than 7 hours. .
    ${ }^{(2)}$ Music Fees \& Special Class Fees are dependent on specific class enrollment and are not included here. Fees are available online through Class Search.
    ${ }^{(3)}$ Undergraduate students with total credit hours in excess of the threshold established by the Arizona Legislature are required to pay tuition on these excess hours. For resident students the excess hours tuition is $\$ 132$ per credit hour up to a maximum of $\$ 924$ for enrollment in 7 or more hours. For nonresident students the excess hours tuition is $\$ 182$ per credit hour up to a maximum of $\$ 2,184$ for enrollment in 12 or more credit hours. See students.asu.edu/tuitionandfees for additional information regarding the Undergraduate Excess Hours Tuition.
    ${ }^{(4)}$ If you have been admitted to the Barrett Honors College, an honors fee of $\$ 500$ for incoming freshmen and $\$ 450$ for continuing students will be assessed each fall and spring semester, in addition to tuition and fees presented above.
    ${ }^{(5)}$ All amounts shown in the Tuition and Fees Schedules or in other University publications or web pages represent tuition and fees as currently approved. However, Arizona State University reserves the right to increase or modify tuition and fees without prior notice, upon approval by the Arizona Board of Regents or as otherwise consistent with Board policy and to make such modifications

[^2]:    *The ASU Tuition Commitment is that full-time undergraduate resident tuition will increase at a reasonable rate from the semester of admission or readmission. For more information about the Tuition Commitment and the Commitment Period please refer tostudents.asu.edu/tuitionandfees
    ${ }^{(1)}$ Resident tuition for enrollment in 7 hours or more is $\$ 1$ less during Spring semester. The Financial Aid Trust fee is $\$ 1$ less during Spring semester for enrollment in less than 7 hours.
    ${ }^{(2)}$ Music Fees \& Special Class Fees are dependent on specific class enrollment and are not included here. Fees are available online through Class Search.

[^3]:    Accounting Scholars Program Term 8 Courses

[^4]:    - Global Politics Concentration Courses: Two courses required from each group.

[^5]:    International Business Course
    ECN 306: Survey of International Economics (SB \& G)

    ECN 331: Economics of the European Economic Union (SB \& G)

[^6]:    International Business Course
    ECN 306: Survey of International Economics (SB \& G)

    ECN 331: Economics of the European Economic Union (SB \& G)

    ECN 335: South Asia and the World
    Economy (SB \& G)
    ECN 360: Economic Development (SB \& G)
    ECN 365: Economics of Russia and Eastern
    Europe (SB \& G)

[^7]:    Upper Division Entrepreneurship Elecitve
    MGT 310: Collaborative Team Skills
    MGT 350: Seminar in International Business
    MGT 411: Leading Organizations
    MGT 450: Consulting Projects (L)

[^8]:    ART 231: Sculpture I

[^9]:    Notes:

    - Submit samples of studio work for evaluation to the Herberger Institute Office of Student Success, Design South (CDS), room 101. Most studio and some lecture courses are sequential, must be taken in, and may be offered only during the semester noted.

[^10]:    Notes:

    - Submit samples of studio work for evaluation to the Herberger Institute Office of Student Success, Design South (CDS), room 101. Most studio and some lecture courses are sequential, must be taken in, and may be offered only during the semester noted.

[^11]:    - Prior to term 1:
    - Milestone 1: All students who wish to enroll in an undergraduate music degree program are required to pass an entrance audition in their primary performing medium (instrument or voice) before pursuing a major in the School of Music.
    - Milestone 2: All music majors must take the music theory diagnostic exam before registering for classes. Contact the School of Music Undergraduate Office (480.965.5069) for testing information.
    - Milestone 3: All music majors (with the exception of those auditioning on keyboard instruments) must take the piano diagnostic exam prior to registering for class piano. Students who do not take the diagnostic will register for MUP 131 and may take the diagnostic during the week before school starts.
    - MUP 194 is for ASU freshman students only. Transfer students must substitute an additional semester of MUP 100 for a total six semesters of MUP 100 .

[^12]:    Upper Division Technical Electives
    IEE 300: Economic Analysis for Engineers
    MAE $3^{* *}$
    MAE 4** $^{*}$

[^13]:    General Studies designations listed on the major map are current for the 2011-2012 academic year

[^14]:    Lab Science Requirements
    PHY 121: University Physics I: Mechanics (SQ)AND PHY 122: University Physics Laboratory I (SQ)

    PHY 131: University Physics II: Electricity and Magnetism (SQ)AND PHY 132: University Physics Laboratory II (SQ)

    CHM 113: General Chemistry I (SQ)AND CHM 116: General Chemistry II (SQ)

    GLG 101: Introduction to Geology I
    (Physical) (SQ \& G)AND GLG 103: Introduction to Geology I-Laboratory (SQ)

    GLG 102: Introduction to Geology II
    (Historical) (SG \& H)AND GLG 104:
    Introduction to Geology II-Laboratory (SG)

[^15]:    Notes:

    - Majors must maintain at least a 2.50 ASU cumulative GPA and a 2.50 JMC cumulative GPA to take JMC courses beyond JMC 201.
    - Students must complete at least 12 hours of upper-division coursework outside the major.

[^16]:    ${ }^{1}$ Complete First-Year Composition and Mathematics (MA) requirement by the end of term 3
    ${ }^{2}$ Grades of "C" or better are required for all courses within these categories.
    ${ }^{3}$ There is no specific elective or minor requirement for the BIS degree. Students needing more than 15 hours of electives to meet the 120 hour requirement are encouraged to pursue a minor in addition to their BIS concentration; however, minors are not required.

[^17]:    CHM/ BIO/ PHY Approved Courses
    CHM 107: Chemistry and Society (SQ \& G)
    AND CHM 108: Chemistry and Society
    Laboratory (SQ)
    CHM 113: General Chemistry I (SQ)
    CHM 114: General Chemistry for Engineers (SQ)

    BIO 100: The Living World (SQ)
    BIO 181: General Biology I (SQ)
    PHY 101: Introduction to Physics (SQ)
    PHY 111: General Physics (SQ)AND PHY 113: General Physics Laboratory (SQ)

    PHY 121: University Physics I: Mechanics (SQ)AND PHY 122: University Physics Laboratory I (SQ)

[^18]:    ${ }^{1}$ Complete First-Year Composition and Mathematics (MA) requirement by the end of term 3 ${ }^{2}$ Integrated Studies courses are selected in consultation with an advisor. Students may not choose to major in Integrated Studies as freshmen. Instead, the major is approved on a case by case basis from students who have completed at least 30 graded hours at ASU and who have earned a minimum GPA of 3.25 . In addition, students are required to submit three letters from faculty who are willing to mentor them through the program as well as to design a set of courses that create a holistic major that is unavailable at ASU in any other form. All information is to be submitted to Asst. Dean Barbara Colby, who will determine the viability and integrity of the proposed degrees

[^19]:    Notes:

    - All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the 202 level. Check with an your advisor for the proficiency level of specific languages. The proficiency courses require students to read, write, and speak the language selected, and proficiency requires students to earn a grade of C or better. In the case of French, German and Spanish, students may complete an online placement exam. The exam is found at http://silc.asu.edu/testing/undergraduate/language_placement.
    - All students pursuing a bachelor of science degree in the College of Liberal Arts and Sciences must complete the two-course Science and Society requirement.A A list of all approved courses, may be found at http://clas.asu.edu/scienceandsociety. A At least one of the two courses taken from the list must be upper division.Â Science and society courses cannot be used to also fill core general studies requirements such as SB, HU, SQ or SG. Only one of the courses taken for science and society can be usec to fill a major, minor or related fields requirement.A At the far right side of the list, you will see which of the three science and society learning goals are filled by individual courses. Â When you complete both courses, all three learning goals must be filled in order to complete the requirement.Â Finally, a grade of C or better must be earned in order for the course to be used to fill the science and society requirement.
    - Students will choose either a Latin Emphasis or a Greek Emphasis. Students should work with their advisor to determine which language courses to enroll in each semester. Students must maintain a 3.0 GPA in chosen target language courses.
    - Degree offerings in the School of International Letters \& Cultures are flexible liberal arts majors. Students must bear in mind that the credits toward the major and minor can only be accumulated after completion of preparatory language courses. These preparatory courses are not major requirements and do not count toward the hours the student needs to complete degree requirements. Demonstrated proficiency at the intermediate level is required for enrollment in major requirement courses. Students are strongly encouraged to contact an academic advisor regarding clarifications on course applicability.

[^20]:    Notes:

    - All students who are pursuing a bachelor of arts degree in the College of Liberal Arts and Sciences must complete a second language requirement. This requirement has the student show proficiency in a second, non-English language through the fourth semester of college work, which is usually, although not always, designated as the

[^21]:    Media and Expressive Culture
    TCL 101: Introduction to Transborder Chicana/o and Latina/o Studies (HU \& C)

    TCL 111: Introduction to Transborder Chicana/o and Latina/o Culture (C)

    TCL 210: Introduction to Ethnic Studies in the U.S. (C)

    TCL 211: Transborder Chicano/a and Latino/a Poetry

    TCL 220: Transborder Latina/o Expressive Culture ((L or HU) \& C)

    TCL 270: Race and Gender in American Film (HU \& C)

    TCL 305: Transborder Practicum and Field Research.

[^22]:    US \& Mexican Regional Immigration Policy \& Economy

    TCL 101: Introduction to Transborder Chicana/o and Latina/o Studies (HU \& C)

    TCL 111: Introduction to Transborder Chicana/o and Latina/o Culture (C)

    TCL 305: Transborder Practicum and Field Research.

    TCL 314: Transborder Regional Immigration and Economy ((L or SB) \& H \& C)

[^23]:    General Studies designations listed on the major map are current for the 2011-2012 academic year

[^24]:    - Public Programs interdisciplinary requirement (must complete 3 courses from the following list).

[^25]:    Minimum 2.50 GPA ASU Cumulative.

[^26]:    General Studies designations listed on the major map are current for the 2011-2012 academic year.

[^27]:    Upper Division Technical Elective
    AET Upper Division Elective
    ALT Upper Division Elective
    cet linnann ni,iminn Elantian

[^28]:    Upper Division Humanities, Fine Arts and Design (HU) OR
    Upper Division Social and Behavioral Sciences (SB)

